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1933

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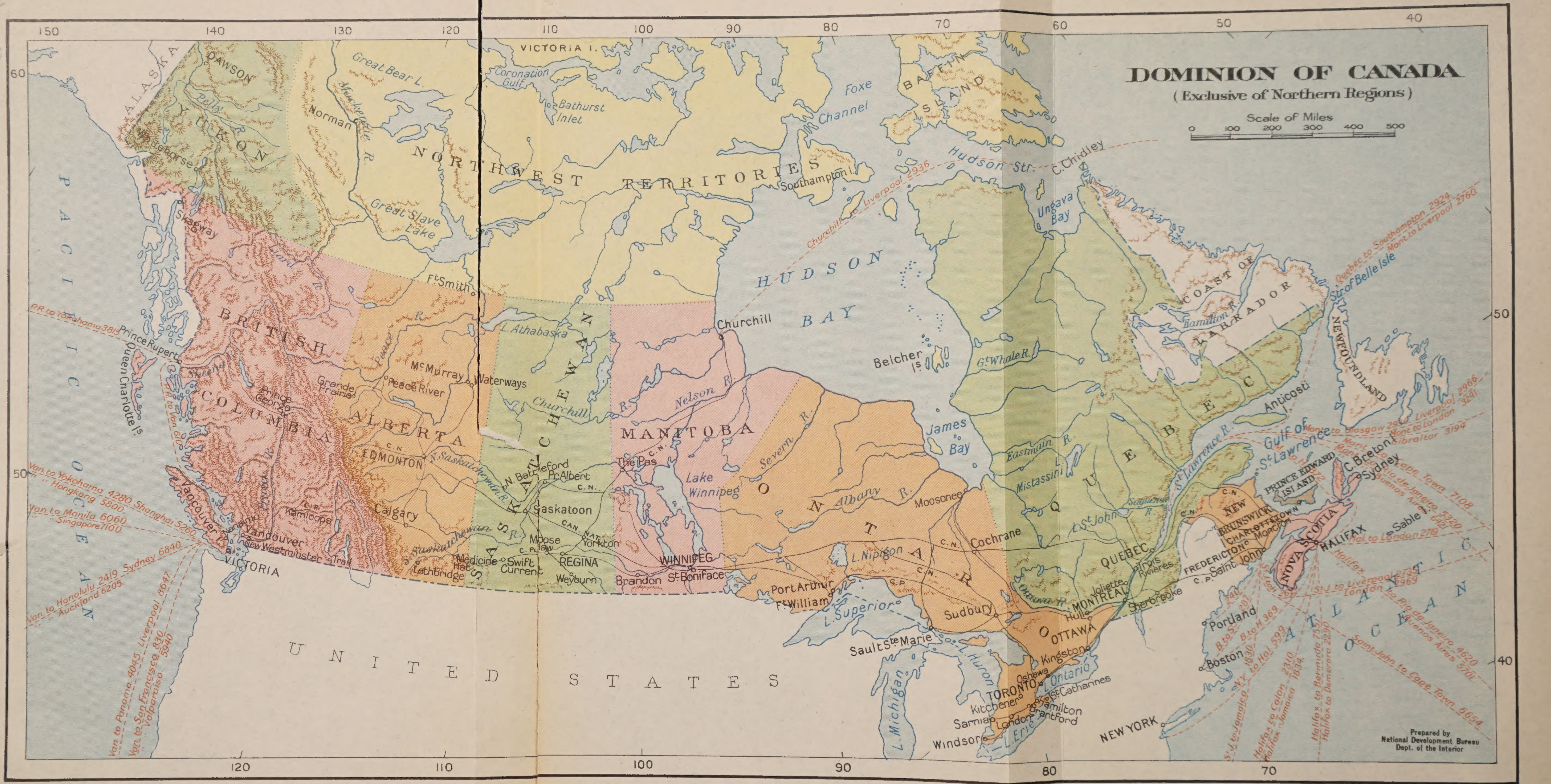

DOMINION OF CANADA

(Exclusive of Northern Regions)

Scale of Miles
0 100 200 300 400 500
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YUKON
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
NEW BRUNSWICK
NOVA SCOTIA
PRINCE EDWARD ISLAND
COAST OF LABRADOR
NEWFOUNDLAND
BAFFIN ISLAND
ALASKA
UNITED STATES
PACIFIC OCEAN
ATLANTIC OCEAN
HUDSON BAY
James Bay
Hudson Str.
Foxe Channel
Ungava Bay
Gulf of St Lawrence
VICTORIA I.
Coronation Gulf
Bathurst Inlet
Great Bear L.
Great Slave Lake
L. Athabaska
Lake Winnipeg
L. Nipigon
L. Superior
L. Michigan
L. Huron
L. Ontario
L. Erie
Mackenzie R.
Peace R.
Churchill R.
Nelson R.
Severn R.
Albany R.
Saskatchewan R.
St Lawrence R.
Dawson
Whitehorse
Skagway
Norman
Ft Smith
Prince Rupert
Queen Charlotte Is
Prince George
Grande Prairie
Peace River
McMurray
Waterways
Edmonton
Calgary
Lethbridge
Medicine Hat
Kamloops
Vancouver
New Westminster
Victoria
Nanaimo
N. Battleford
Pr. Albert
Saskatoon
Moose Jaw
Swift Current
Regina
Weyburn
Yorkton
The Pas
Brandon
Winnipeg
St Boniface
Churchill
Belcher Is
Gt Whale R.
Southampton I.
C. Chidley
Port Arthur
Ft William
Sault Ste Marie
Moosonee
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PREFACE.

The Canada Year Book had its origin in the first year of the Dominion, when the "Year Book and Almanac of British North America"—being (to quote its sub-title) "an Annual Register of political, vital and trade statistics, customs tariffs, excise and stamp duties, and all public events of interest in Upper and Lower Canada, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, and West Indies"—was founded. Subsequently the title was changed to "The Year Book and Almanac of Canada,—an annual statistical abstract of the Dominion and a register of legislation and of public men in British North America". It was published annually from 1867 to 1879.

In 1886, after the passing of a general Statistics Act, the "Statistical Abstract and Record of Canada" was instituted as an official book of reference respecting the institutions, population, finance, trade and general conditions of the Dominion, "with comparative data for the United Kingdom, British Possessions and foreign countries". The work was prepared in the General Statistical Office of the Department of Agriculture, and was continued annually until 1904, under the direction of Dr. George Johnson, F.S.S. In 1905 the General Statistical Office was amalgamated with the Census Office (which was at the same time made a permanent organization), and the Year Book was remodelled by Dr. Archibald Blue, Chief Officer, and continued under the title "The Canada Year Book, Second Series".

In the reorganization and centralization of statistics which followed the report of the Royal Commission on Statistics of 1912, and the establishment of the Dominion Bureau of Statistics in 1918, the improvement of the Year Book, both in content and method of presentation, was made a primary object, and this improvement has been continued down to the present time.

A feature of the Year Book has been the inclusion of special articles from time to time dealing more fully than is possible in the regular material, with some phase of science or art or of the social or economic development of Canada. Thus, in the present edition there appears a special article prepared in the Department of External Affairs dealing with the Imperial Economic Conference of 1932. Attention may also be drawn to the inclusion in Chapter I of a special study on Droughts in Western Canada, contributed by the Climatologist of the Meteorological Service. Additional census analyses becoming available from the census of 1931 have facilitated a more extensive and up-to-date treatment of Population. The chapter on Internal Trade has been extended to present summary statistics of the first comprehensive census of wholesale and retail trade and services to be taken in Canada; this census is also one of the first of its kind in any country. The chapter on Transportation and Communications includes a description of the new Canadian National-Canadian Pacific Act implementing the report of the Duff Commission, together with a description of the aims and objects of the Radio Broadcasting Commission. A special article on the Growth of Life Insurance in Canada, which appeared in the 1925 edition, has been revised in consequence of recent changes in insurance legislation. The Public Health chapter has also been improved by the inclusion of the new annual statistics of institutions. Finally, all parts of the volume have received a careful revision by competent authorities in each branch of the national activities.

A list of the special articles appearing in earlier volumes of the Year Book and not repeated in this edition is presented at page ii of this Introduction, immediately preceding the map. The latest available data on immigration, trade, and from the 1931 Census of Agriculture will be found in the Appendices.

The present volume has been edited by S. A. Cudmore, B.A. (Tor.), M.A.. (Oxon.), F.S.S., F.R. Econ. Soc., assisted by A. E. Millward, B.A., B. Com., W. H. Lanceley, and R. F. Clarke, M.C., D.L.S., of the editorial staff of the General Statistics Branch of the Bureau. Grateful acknowledgments are hereby tendered to the numerous officials of the Dominion and Provincial Governments who have assisted in the collection of information. An effort has been made to apportion due credit to the various individuals and services concerned by means of footnotes to those chapters and sections which have been contributed, or in the compilation of which co-operation has been received.

While the greatest care has been taken in the preparation of the volume, there are doubtless imperfections and, with a view to the improvement of future editions, the Editor will be glad to hear of any errrors which may have escaped his notice, and to receive any suggestions with regard to omissions or to method of treatment.

DOMINION BUREAU OF STATISTICS,
OTTAWA, Sept. 1, 1933.

R. H. COATS,
Dominion Statistician.

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STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles: Land, 3,457,484; Fresh Water, 226,979; Total, 3,684,463

	Item.		1871.	1881.	1891.	1901.	1906.
	Population[1]—						
1	Prince Edward Island.........	No.	94,021	108,891	109,078	103,259	98,222
2	Nova Scotia..................	"	387,800	440,572	450,396	459,574	476,119
3	New Brunswick................	"	285,594	321,233	321,263	331,120	341,682
4	Quebec.......................	"	1,191,516	1,359,027	1,488,535	1,648,898	1,822,992
5	Ontario......................	"	1,620,851	1,926,922	2,114,321	2,182,947	2,352,470
6	Manitoba.....................	"	25,228	62,260	152,506	255,211	365,688
7	Saskatchewan.................	"	–	–	–	91,279	257,763
8	Alberta......................	"	–	–	–	73,022	185,412
9	British Columbia.............	"	36,247	49,459	98,173	178,657	268,276
10	Yukon........................	"	–	–	–	27,219	14,899
11	Northwest Territories.........	"	48,000	56,446	98,967	20,129	18,364
	Canada.......................	"	3,689,257	4,324,810	4,833,239	5,371,315	6,201,887
	Immigration (fiscal years)—						
12	From United Kingdom........	No.	–	–	11,383[2]	11,810	86,796
13	" United States...........	"	–	–	2,412[2]	17,987	57,796
14	" Other Countries.........	"	–	–	7,921[2]	19,352	44,472
	Totals.......................	"	27,773	47,991	21,716[2]	49,149	189,064
	Agriculture—						
15	Area of occupied farms........	acre	36,046,401	45,358,141	58,997,995	63,422,338	–
16	Improved lands...............	"	17,335,818	21,899,181	27,729,852	30,166,033	–
	Field Crops[3]—						
17	Wheat........................	acre	1,646,781	2,366,554	2,701,213	4,224,542	–
		bush.	16,723,873	32,350,269	42,223,372	55,572,368	–
		$	16,993,265	38,820,323	31,667,529	36,122,039	–
18	Oats.........................	acre	–	–	3,961,356	5,367,655	–
		bush.	42,489,459	70,493,131	83,428,202	151,497,407	–
		$	15,966,310	23,967,665	31,702,717	51,509,118	–
19	Barley.......................	acre	–	–	868,464	871,800	–
		bush.	11,496,038	16,844,868	17,222,795	22,224,366	–
		$	8,170,735	11,791,408	8,611,397	8,889,746	–
20	Corn.........................	acre	–	–	195,101	360,758	–
		bush.	3,802,830	9,025,142	10,711,380	25,875,919	–
		$	2,283,145	5,415,085	5,034,348	11,902,923	–
21	Potatoes.....................	acre	403,102	464,289	450,190	448,743	–
		bush.	47,330,187	55,368,790	53,490,857	55,362,635	–
		$	15,211,774	13,288,510	21,396,342	13,840,658	–
22	Hay and clover...............	acre	3,650,419	4,458,349	5,931,548	6,543,423	–
		ton	3,818,641	5,055,810	7,693,733	6,943,715	–
		$	38,869,900	40,446,480	69,243,597	85,625,315	–
	Total Areas, Field Crops....	acre	–	–	15,662,811	19,763,740	–
	Total Values, Field Crops[4]..	$	111,116,606	155,277,427	194,766,934	237,682,285	–
	Live Stock—						
23	Horses.......................	No.	836,743	1,059,358	1,470,572	1,577,493	–
		$	–	–	–	118,279,419	–
24	Milch cows...................	No.	1,251,209	1,595,800	1,857,112	2,408,677	–
		$	–	–	–	69,237,970	–
25	Other cattle.................	No.	1,373,081	1,919,189	2,263,474	3,167,774	–
		$	–	–	–	54,197,341	–
26	Sheep........................	No.	3,155,509	3,048,678	2,562,781	2,510,239	–
		$	–	–	–	10,490,594	–
27	Swine........................	No.	1,366,083	1,207,619	1,733,850	2,353,828	–
		$	–	–	–	16,445,702	–
	Total Values, Live Stock....	$	–	–	–	268,651,026	–
	Dairying[3]—						
28	Cheese, factory..............	lb.	155,524	54,574,856	97,418,855	220,833,269	204,788,583[8]
		$	17,585	5,130,036	9,644,467	22,221,430	23,597,639[8]
29	Butter, creamery.............	lb.	981,939	1,365,912	3,654,364	36,066,739	45,930,294[8]
		$	188,532	225,375	635,859	7,240,972	10,949,062[8]
30	Butter, home made...........	lb.	74,190,584	102,545,169	111,577,210	105,343,076	–
		$	14,244,592	16,919,953	19,414,435	21,384,644	–
31	Miscellaneous dairy products..	$	–	–	–	15,623,907	–
	Total Values, Dairy Products	$	15,023,966	22,743,939	30,315,214	66,740,953	–
32	**Forestry**—Exports of Wood, Wood Products and Paper.....	$	–	–	25,351,085	33,099,915	45,716,762
33	**Fisheries**....................	$	7,573,199	15,817,162	18,977,874	25,737,153	26,279,485
34	**Raw Furs**.....................	$	–	987,555	768,983	899,645	–

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[1] Estimated populations are given for inter-censal and post-censal years. [2] 1897. [3] The figures for the decennial census years 1871-1921 are for the next preceding years. Export prices have been used in working out values of dairy products.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

Area of the Dominion of Canada in square miles: Land, 3,457,484; Fresh Water, 226,979; Total, 3,684,463.

1911.	1916.	1921.	1926.	1929.	1930.	1931.	1932.[4]	
93,728	90,916	88,615	87,000	88,000	88,000	88,038	88,000	1
492,338	506,660	523,837	515,000	515,000	514,000	512,846	513,000	2
351,889	368,844	387,876	396,000	404,000	406,000	408,219	409,000	3
2,005,776	2,177,352	2,361,199	2,603,000	2,772,000	2,825,000	2,874,255	2,904,000	4
2,527,292	2,722,804	2,933,662	3,164,000	3,334,000	3,386,000	3,431,683	3,459,000	5
461.394	553.860	610,118	639,000	677,000	689,000	700,139	705,000	6
492.432	647,835	757,510	821,000	883,000	903,000	921,785	971,000	7
374.295	496,525	588,454	608,000	684,000	708,000	731,605	740,000	8
392.480	457,243	524,582	606,000	659,000	676,000	694,263	704,000	9
8,512	6,317	4,157	4,000	4,000	4,000	4,230	4,000	10
6,507	7,228	7,988	7,000	7,000	7,000	9,723	9,000	11
7,206,643	8,035,584	8,788,483[7]	9,450,000	10,027,000	10,206,000	10,376,786	10,506,000	
123,013	8,664	74,262	37,569	58,880	64,082	27,584	7,088	12
121,451	36,937	48,059	18,778	30,560	30,727	24,280	14,297	13
66,620	2,936	26,156	39,717	78,282	68,479	36,359	4,367	14
311,084	48,537	148,477	96,064	167,722	163,288	88,223	25,752	
108,968,715	–	140,887,903	–	–	–	163,568,369	–	15
48,733,823	–	70,769,548	–	–	–	85,803,645	–	16
8,864,154	15,369,709	17,835,734	22,895,649	25,255,002	24,897,900	26,200,928	27,182,100	17
132.077,547	262,781,000	226,508,411	407,136,000	304,520,000	420,672,000	321,325,000	428,514,000	
104,816,825	344,096,400	374,178,601	442,221,000	319,715,000	204,693,000	123,550,000	129,105,000	
8.656,179	10,996,487	13,879,257	12,741,340	12,479,477	13,258,700	12,871,341	13,148,400	18
245,393,425	410,211,000	364,989,218	383,416,000	282,838,300	423,148,000	328,278,000	391,561,000	
86,796,130	210,957,500	180,989,587	184,098,000	168,017,000	102,919,000	77,970,000	71,538,000	
1,283,094	1,802,996	2,043,669	3,642,462	5,925,542	5,558,700	3,768,269	3,757,600	19
28,848,310	42,770,000	42,956,049	99,987,100	102,313,300	135,160,200	67,382,600	80,773,000	
14,653,697	35,024,000	33,514,070	52,059,000	60,505,000	27,254,000	17,465,000	15,794,000	
293,951	173,000	204,775	209,725	152,055	161,400	131,695	130,000	20
14,417,599	6,282,000	10,822,278	7,813,000	5,183,000	5,826,000	5,449,000	5,057,000	
5,774,039	6,747,000	7,081,140	7,780,000	5,469,000	5,054,000	2,274,000	2,276,000	
464,504	472,992	534,621	523,112	543,727	571,300	583,926	521,500	21
55,461,473	63,297,000	62,230,052	46,937,000[5]	39,930,000[5]	48,241,000[5]	52,305,000[5]	39,416,000[5]	
27,426,765	50,982,300	44,635,547	69,204,000	63,372,000	39,858,000	22,359,000	24,406,000	
8,289,407	7,821,257	8,541,093	9,516,125	10,560,101	10,618,200	8,532,369	8,811,600	22
10,406,367	14,527,000	8,593,393	14,058,000	15,833,000	16,397,000	13,960,000	13,559,000	
90,115,531	168,547,900	169,822,397	170,473,000	184,528,000	161,122,000	106,343,000	96,278,000	
30,556,168	38,930,333	47,553,418	56,097,836	61,207,034	62,214,670	58,074,905	59,633,500	
384,513,795	886,494,900	933,045,936	1,104,983,100	948,981,400	662,040,900	432,199,400	416,586,900	
2,598,958	3,246,430	3,624,262	3,398,114	3,376,487	3,295,000	3,128,996	3,088,630	23
381,915,505	418,686,000	440,502,040	245,119,000	235,971,000	202,013,000	155,908,000	141,640,000	
2,595,255	2,835,532	3,324,653	3,839,191	3,684,766	3,683,000	3,365,000	3,624,600	24
109,575,526	198,896,000	203,555,836	201,236,000	273,817,000	218,822,000	143,166,000	116,349,000	
3,930,828	3,763,155	5,194,831	4,731,688	5,139,866	5,254,000	4,626,000	4,886,500	25
86,278,490	204,477,000	139,590,484	148,742,000	239,713,000	182,263,000	114,828,000	83,685,000	
2,174,300	2,025,030	3,203,966	3,142,476	3,635,923	3,696,000	3,608,000	3,644,500	26
10,701,691	20,927,000	20,704,509	31,417,000	36,118,000	25,275,000	18,596,000	12,084,000	
3,634,778	3,484,982	3,404,730	4,359,582	4,381,725	4,000,000	4,716,720	4,639,100	27
26,986,621	60,700,000	36,893,244	69,958,000	71,111,000	58,852,000	32,773,000	21,964,000	
615,457,833	903,686,000	836,413,401	696,472,000	856,730,000	687,225,000	465,271,000	375,722,000	
199,904,205	192,968,597	162,117,494	171,731,631	118,746,286	119,105,203	113,956,639	–	28
21,587,124	35,512,622	28,710,030	28,807,841	21,471,330	18,089,870	12,824,695	–	
64,489,398	82,564,130	128,734,610	177,209,287	170,810.230	185,751,061	225,955,246	–	29
15,597.807	26,966,355	48,135,439	61,753,390	65,929,782	56,670,504	50,198,878	–	
137,110,200	–	100,000,000	95,000,000	88,000,000	97,214,696	104,640,000	–	30
30,269,497	–	29,840,000	28,252,777	28,929,000	23,844,000	21,723,000	–	
35,927,426	–	98,750,881	158,490,971	175,412,745	171,240,085	76,497,007	–	31
103,381,854	–	205,436,350	277,304,979	291,742,857	269,844,459	161,243,580	–	
56,334,695	83,116,282	284,561,478	278,674,960	288,621,745	289,566,675	230,604,474	175,740,269	32
34,667,872	35,860,708	34,931,935	56,360,633	53,518,521	47,804,216	30,517,306	25.956,083	33
1,927,550	–	10,151,594	15,072,244	18,745,473	12,158,376	11,681,221	10,156,225	34

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[4] The figures for 1932 are subject to revision. [5] Cwt. [6] See Monthly Bulletin of Agricultural Statistics for May, 1921, for particulars of the values of field crops for the years 1871, 1881, 1891 and 1901. [7] Includes Canadian Navy. [8] Figures are for 1907.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Mineral Production—						
1	Gold	oz.	105,187	63,524	45,018	1,167,216	556,415
		$	2,174,412	1,313,153	930,614	24,128,503	11,502,120
2	Silver	oz.	–	355,083[1]	414,523	5,539,192	8,473,379
		$	–	347,271[1]	409,549	3,265,354	5,659,455
3	Copper	lb.	–	3,260,424[1]	9,529,401	37,827,019	55,609.888
		$	–	366,798[1]	1,226,703	6,096,581	10,720,474
4	Lead	lb.	–	204,800[1]	88,665	51,900,958	54,608,217
		$	–	9.216[1]	3,857	2,249,387	3,089.187
5	Nickel	lb.	–	830,477[11]	4,035,347	9,189,047	21,490,955
		$	–	498,286[11]	2,421,208	4,594,523	8,948,834
6	Pig iron	ton	–	24,827[1]	23,891	274,376	598,411
		$	–	366,192[1]	368,901	3,512,923	7,955,136
7	Coal	ton	1,063,742[2]	1,537,106	3,577,749	6,486,325	9,762,601
		$	1,763,423[2]	2,688,621	7,019,425	12,699,243	19,732,019
8	Cement	brl.	–	69,843[1]	93,479	450,394	2,128,374
		$	–	81,909[1]	108,561	660,030	3,170,859
	Totals, Mineral Production.	$	–	10,221,255[3]	18,976,616	65,797,911	79,286,697
	Electric Statistics—						
9	Power Houses	No.	–	–	80	58	157
10	Capital invested	$	–	–	4,113,771	11,891,025	80,393,445
11	Kilowatt hours generated[4]	No.	–	–	–	–	–
12	Customers	No.	–	–	–	–	–
	Water Power—						
13	Turbine H.P. installed	No.	–	–	71,219	238,902	608,002
	Manufactures[5]—						
14	Employees	No.	187,942	254,894	272,033	339,173	383,920
15	Capital	$	77,964,020	164,957,423	353,213,000	446,916,487	833,916,155
16	Salaries and wages	$	40,851,009	59,401,702	79,234,311	113,249,350	162,155,578
17	Products—						
	Gross	$	221,617,773	309,731,867	368,696,723	481,053,375	706,446,578
	Net	$	96,709,927	–	–	214,525,517	–
	External Trade (fiscal years)—						
18	Exports[6]	$	57,630,024	83,944,701	88,671,738	177,431,386	235,483,956
19	Imports[7]	$	84,214,388	90,488,329	111,533,954	177,930,919	283,740,280
	Totals, External Trade	$	141,844,412	174,433,030	200,205,692	355,362,305	519,224,236
20	Exports to United Kingdom	$	21,733,556	42,637,219	43,243,784	92,857,525	127,456,465
21	Imports from United Kingdom	$	48,498,202	42,885,142	42,018,943	42,820,334	69,183,915
22	Exports to United States	$	29,164,358	34,038,431	37,743,430	67,983,673	83,546,306
23	Imports from United States	$	27,185,586	36,338,701	52,033,477	107,377,906	169,256,452
	Exports, Domestic, by Chief Items—						
24	Wheat	bush.	1,748,977	2,523,673	2,108,216	9,739,758	40,399,402
		$	1,981,917	2,593,820	1,583,084	6,871,939	33,658,391
25	Wheat flour	brl.	306,339	439,728	296,784	1,118,700	1,532,014
		$	1,609,849	2,173,108	1,388,578	4,015,226	6,179,825
26	Oats	bush.	542,386	2,926,532	260,560	8.155,063	2,700,303
		$	231,227	1,791,873	129,917	2,490,521	1,083,347
27	Hay	ton	23,487	168,381	65,083	252,977	206,714
		$	290,217	1,813,208	559,489	2,097,882	1,529,941
28	Bacon and hams, shoulders and sides.	cwt.	103,444	103,547	75,541	1,055,495	1,029,079
		$	1,018,918	758,334	628,469	11,778,446	12,086,868
29	Butter	lb.	15,439.266	17,649,491	3,768,101	16,335,528	34,031,525
		$	3,065,234	3,573,034	602,175	3,295,663	7,075,539
30	Cheese	lb.	8,271.439	49,255,523	106,202,140	195,926,697	215,834,543
		$	1,109,906	5,510,443	9,508,800	20,696,951	24,433,169
31	Gold	$	163,037	767,318	554,126	24,445,156	12,991,916
32	Silver	oz.	–	–	–	4,022,019	7,261,527
		$	595,261	34,494	238,367	2,420,750	4,310,528
33	Copper[8]	lb.	6,246,000	39,604,000	10,994,498	26,345,776	44,282,348
		$	120,121	150,412	505,196	2,659,261	7,148,633
34	Nickel	lb.	–	–	5,352,043	9,537,558	23,959,841
		$	–	–	240,499	958,365	2,166,936
35	Coal	ton	318,287	420,055	833,684	1,888,538	1,820,511
		$	662,451	1,123,091	2,916,465	5,307,060	4,643,198
36	Asbestos	ton	–	–	7,022	26,715	57,075
		$	–	–	513,909	864,573	1,578,137
37	Wood pulp	cwt.	–	–	–	–	–
		$	–	–	280,619	1,937,207	3,478,150
38	Newsprint paper	cwt.	–	–	–	–	–
		$	–	–	–	–	–

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[1] 1887. [2] 1874. [3] 1886. [4] 000's omitted. [5] The statistics of manufactures in 1871 and 1881 include works employing fewer than 5 hands, while those of 1891, 1901, 1911 and 1916 are for works with 5 hands and over, except in the case of butter and cheese factories, flour and grist mills, electric light plants, lumber, lath and shingle mills, lime kilns, brick and tile works, and fish canneries. The figures for these years are

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1929.	1930.	1931.	1932.[9]	
473,159	930,492	926,329	1,754,228	1,928,308	2,102,068	2,693,892	3,050,581	1
9,781,077	19,234,976	19,148,920	36,263,110	39,861,663	43,453,601	55,687,688	63,061,103	
32,559,044	25,459,741	13,543,198	22,371,924	23,143,261	26,443,823	20,562,247	18,356,393	2
17,355,272	16,717,121	8,485,355	13,894,531	12,264,308	10,089,376	6,141,943	5,813,769	
55,648,011	117,150,028	47,620,820	133,094,942	248,120,760	303,478,356	292,304,390	247,678,503	3
6,886,998	31,867,150	5,953,555	17,490,300	43,415,251	37,948,359	24,114,065	15,294,022	
23,784,969	41,497,615	66,679,592	283,801,265	326,522,566	332,894,163	267,342,482	255,949,960	4
827,717	3,532,692	3,828,742	19,240,661	16,544,248	13,102,635	7,260,183	5,409,758	
34,098,744	82,958,564	19,293,060	65,714,294	110,275,912	103,768,857	65,666,320	30,327,968	5
10,229,623	29,035,498	6,752,571	14,374,163	27,115,461	24,455,133	15,267,453	7,179,862	
917,535	1,169,257	665,676	820,426	1,209,779	836,839	470,443	161,426	6
12,307,125	16,750,898	15,511,828	16,011,173[10]	21,603,200[10]	14,345,800[10]	7,863,111[10]	2,829,272[10]	
11,323,388	14,483,395	15,057,495	16,478,131	11,496,557	14,881,324	12,243,211	11,723,411	7
26,467,646	38,817,481	72,451,656	59,875,094	63,065,170	52,849,748	41,207,682	37,045,272	
5,692,915	5,369,560	5,752,885	8,707,021	12,284,081	11,032,538	10,161,658	4,498,721	8
7,644,537	6,547,728	14,195,143	13,013,283	19,337,235	17,713,067	15,826,243	6,930,721	
103,220,994	177,201,534	171,923,342	240,437,123	310,850,246	279,873,578	228,029,018	182,320,150	
266	307	510	595	585	587	587	–	9
110,838,746	248,573,546	484,669,451	756,220,066	1,055,731,532	1,138,200,016	1,229,988,951	–	10
–	–	5,614,132	12,093,445	17,962,515	18,093,802	16,330,867	–	11
–	–	973,212	1,337,562	1,555,883	1,607,766	1,632,792	–	12
1,363,134	2,222,169	2,754,157	4,549,383	5,727,162	6,125,012	6,666,337	7,045,260	13
515,203	–	456,076	581,539	694,434	644,439	557,426	–	14
1,247,583,609	1,958,705,230	3,190,026,358	3,981,569,590	5,083,014,754	5,203,316,760	4,961,312,408	–	15
241,008,416	283,311,505	518,785,137	653,850,933	813,049,842	736,092,766	624,545,561	–	16
1,165,975,639	1,381,547,225	2,576,037,029	3,247,803,438	4,063,987,279	3,428,970,628	2,698,461,862	–	17
564,466,621	589,603,792	1,209,143,344	1,492,645,039	1,997,350,365	1,761,986,726	1,474,581,851	–	
274,316,553	741,610,638	1,189,163,701	1,315,355,791	1,363,709,672	1,120,258,302	799,742,667	576,344,302	18
452,724,603	508,201,134	1,240,158,882	927,328,732	1,265,679,091	1,248,273,582	906,612,695	578,503,904	19
727,041,156	1,249,811,772	2,429,322,583	2,242,684,523	2,629,388,763	2,368,531,584	1,706,355,362	1,154,848,206	
132,156,924	451,852,399	312,844,871	508,237,560	429,730,485	281,745,965	219,246,499	174,043,725	20
109,934,753	77,404,361	213,973,562	163,731,210	194,041,381	189,179,738	149,497,392	106,371,779	21
104,115,823	201,106,488	542,322,967	474,987,367	499,612,145	515,049,763	349,660,563	235,186,674	22
275,824,265	370,880,549	856,176,820	608,618,542	868,012,229	847,442,037	584,407,018	351,686,775	23
45,802,115	157,745,469	129,215,157	249,679,470	370,459,551	177,006,369	217,243,037	191,315,933	24
45,521,134	172,896,445	310,952,138	364,364,388	428,524,326	215,753,475	177,419,769	115,739,383	
3,049,046	6,400,214	6,017,032	10,084,974	11,405,728	7,893,960	7,218,188	5,413,740	25
13,854,790	35,767,044	66,520,490	69,687,598	65,117,779	45,457,195	32,876,234	18,897,543	
5,431,662	26,816,322	14,321,048	43,058,283	15,657,348	6,406,181	3,258,501	13,841,300	26
2,144,846	14,637,849	14,152,033	24,237,692	10,241,938	4,055,855	1,146,266	4,662,335	
326,132	255,407	179,398	368,787	113,763	162,188	156,722	56,281	27
2,723,291	5,849,426	4,210,594	3,711,840	1,127,270	2,007,944	1,590,657	523,102	
598,745	1,536,517	982,338	1,253,760	366,582	267,026	121,770	185,146	28
8,526,332	27,090,113	31,492,407	28,590,301	7,874,026	6,579,726	2,914,273	2,446,564	
3,142,682	3,441,183	9,739,414	23,303,865	1,889,200	1,309,400	1,162,900	10,917,300	29
744,288	1,018,769	5,128,831	8,773,125	764,836	543,851	389,419	2,362,888	
181,895,724	168,961,583	133,620,340	148,333,500	112,609,200	92,293,700	79,590,400	85,424,700	30
20,739,507	26,690,500	37,146,722	33,718,587	25,181,853	18,278,004	12,989,726	10,593,967	
5,344,465	16,870,394	3,038,779	25,968,094	12,396,444	34,375,003	17,832,608	13,671,565	31
33,731,010	27,794,566	13,331,050	18,382,415	20,768,801	22,576,768	24,695,827	17,753,631	32
17,269,168	14,298,351	11,127,432	12,365,576	11,962,928	11,569,855	8,927,216	5,160,528	
55,005,342	111,046,300	36,167,900	61,090,600	85,590,600	82,084,600	62,997,100	50,223,700	33
5,575,033	14,670,073	4,336,972	7,037,206	7,936,179	8,769,586	5,629,512	4,076,854	
34,767,523	70,443,000	47,018,300	71,081,400	107,482,200	106,517,500	81,929,300	54,379,100	34
3,842,332	7,714,769	9,405,291	12,829,244	23,880,492	25,034,975	18,246,375	12,109,400	
2,315,171	1,971,124	2,277,202	753,842	841,493	728,267	534,710	333,239	35
6,014,095	6,032,765	16,501,478	4,083,713	4,402,028	3,917,650	2,896,837	1,809,271	
69,829	88,833	191,299	269,652	268,879	286,497	219,541	147,149	36
2,076,477	2,962,010	12,633,389	9,920,900	11,267,188	12,074,065	7,719,974	4,628,117	
6,588,655	8,144,019	14,363,006	19,812,381	16,950,165	17,261,954	13,862,122	11,762,563	37
5,715,532	10,376,548	71,552,037	49,909,870	44,895,717	44,704,958	35,061,689	27,684,782	
–	9,264,080	15,112,586	29,537,366	45,264,586	49,800,821	44,848,479	39,942,149	38
3,092,437	17,974,292	78,922,137	102,238,568	142,343,064	145,610,519	127,352,706	103,003,352	

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for the preceding years in each case. From 1922 statistics are exclusive of construction, hand trades, repair and custom work. Figures for 1925-30 include non-ferrous metal smelting not included in earlier years. [6] Exports of domestic merchandise only. [7] Imports of merchandise for home consumption. [8] Copper, fine, contained in ore, matte, regulus, etc. [9] The figures for 1932 are subject to revision. [10] Estimated on the basis of sales. [11] The figures are for 1889.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Exports, Domestic, by Classes—						
1	Vegetable products (except chemicals, fibres and wood)..	$	–	–	13,742,557	25,541,567	55,828,252
2	Animals and their products (except chemicals and fibres)	$	–	–	36,399,140	68,465,332	84,570,644
3	Fibres, textiles and textile products..........................	$	–	–	872,628	1,880,539	2,602,903
4	Wood, wood products and paper	$	–	–	25,351,085	33,099,915	45,716,762
5	Iron and its products...........	$	–	–	556,527	3,778,897	4,705,296
6	Non-ferrous metals and their products......................	$	–	–	1,618,955	33,395,096	28,455,786
7	Non-metallic minerals and their products (ex. chemicals)	$	–	–	3,988,584	7,356,444	7,817,475
8	Chemicals and allied products,	$	–	–	851,211	791,855	1,784,800
9	All other commodities.........	$	–	–	5,291,051	3,121,741	4,002,038
	Totals, Exports, Domestic.	$	57,630,024	83,944,701	88,671,738	177,431,386	235,483,956
	Imports for Consumption—						
10	Vegetable products (except chemicals, fibres and wood)..	$	–	–	24,212,140	38,036,146	50,307,368
11	Animals and their products (except chemicals and fibres).	$	–	–	8,080,862	14,022,896	23,616,835
12	Fibres, textiles and textile products..........................	$	–	–	28,670,141	37,284,752	59,292,868
13	Wood, wood products and paper	$	–	–	5,203,490	8,196,901	14,341,947
14	Iron and its products...........	$	–	–	15,142,615	29,955,936	49,436,840
15	Non-ferrous metals and their products......................	$	–	–	3,810,626	7,167,318	17,533,430
16	Non-metallic minerals and their products (except chemicals)..	$	–	–	14,139,024	21,255,403	33,757,284
17	Chemicals and allied products..	$	–	–	3,697,810	5,684,999	8,269,169
18	All other commodities.........	$	–	–	8,577,246	16,326,568	27,184,539
	Totals, Imports............	$	84,214,388	90,488,329	111,533,954	177,930,919	283,740,280
	Steam Railways—						
19	Miles in operation...............		2,695	7,331	13,838	18,140	21,353
20	Capital........................	$	257,035,188[1]	284,419,293	632,061,440	816,110,837	1,065,881,629
21	Passengers....	No.	5,190,416[2]	6,943,671	13,222,568	18,385,722	27,989,782
22	Freight.........................	ton	5,670,836[2]	12,065,323	21,753,021	36,999,371	57,966,713
23	Earnings.......................	$	19,470,539[2]	27,987,509	48,192,099	72,898,749	125,322,865
24	Expenses.......................	$	15,775,532[2]	20,121,418	34,960,449	50,368,726	87,129,434
	Electric Railways—						
25	Miles in operation..............	No.	–	–	–	675	814
26	Capital.........................	$	–	–	–	–	–
27	Passengers......................	No.	–	–	–	120,934,656	237,655,074
28	Freight.........................	ton	–	–	–	287,926	506,024
29	Earnings.......................	$	–	–	–	5,768,283	10,966,871
30	Expenses.......................	$	–	–	–	3,435,162	6,675,037
	Canals—						
31	Passengers carried.............	No.	100,377	118,136	146,336	190,428	256,500
32	Freight.........................	ton	3,955,621	2,853,230	2,902,526	5,665,259	10,523,185
	Shipping (Sea-going)—						
33	Entered........................	ton	2,521,573	4,032,946	5,273,935	7,514,732	8,895,353
34	Cleared........................	"	2,594,460	4,071,391	5,421,261	7,028,330	7,948,076
35	Totals.....................	"	5,116,033	8,104,337	10,695,196	14,543,062	16,843,429
	Shipping (Inland International)—						
36	Entered........................	ton	4,055,198	2,934,503	4,098,434	5,720,575	9,352,653
37	Cleared........................	"	3,954,797	2,763,592	4,009,018	5,766,171	8,536,090
38	Totals.....................	"	8,009,995	5,698,095	8,107,452	11,486,746	17,888,743
	Shipping (Coastwise)—						
39	Entered........................	ton	–	7,664,863	12,835,774	17,927,959	23,543,604
40	Cleared........................	"	–	7,451,903	12,150,356	16,516,832	22,780,458
41	Totals.....................	"	–	15,116,766	25,986,130	34,444,796	46,324,062
	Communications—						
42	Telegraphs, Government, miles of line........................		–	1,947	2,699	5,744	6,829
43	Telegraphs, other, miles of line.		–	–	27,866	30,194	31,506
44	Telephones.....................	No.	–	–	–	63,192	–
45	Motor vehicles.................	"	–	–	–	–	2,130[3]

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[1] 1876. [2] 1875. [3] Motor vehicles in 6 provinces numbered 2,130 in 1907.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1929.	1930.	1931.	1932.[4]	
84,368,425	257,019,215	482,140,444	606,058,672	646,514,058	384,635,751	292,280,037	204,398,365	1
69,693,263	138,375,083	188,359,937	190,975,417	158,757,272	133,009,145	83,714,772	68,798,683	2
1,818,931	15,097,691	18,783,884	8,940,046	9,678,019	9,066,226	6,504,182	5,512,130	3
56,334,695	83,116,282	284,561,478	278,674,960	288,621,745	289,566,675	230,604,474	175,740,269	4
9,884,346	66,127,099	76,500,741	74,735,077	82,256,717	78,589,580	38,937,661	15,462,977	5
34,000,996	66,036,542	45,939,377	97,476,270	112,778,194	154,319,429	95,652,063	69,072,888	6
10,038,493	12,096,973	40,345,345	24,712,584	27,401,790	28,545,096	21,107,780	13,456,701	7
3,088,840	15,961,226	20,142,826	17,354,389	19,438,064	22,468,462	12,825,852	10,535,038	8
5,088,564	87,780,527	32,389,669	16,428,376	18,263,813	20,057,938	18,115,846	13,367,251	9
274,316,553	741,610,638	1,189,163,701	1,315,355,791	1,363,709,672	1,120,258,302	799,742,667	576,344,302	
79,214,041	95,421,161	259,431,110	203,417,431	233,130,244	227,048,817	177,628,778	128,621,260	10
30,671,908	38,657,514	61,722,390	49,185,558	71,661,754	69,853,833	45,995,705	24,563,246	11
87,916,282	96,191,485	243,608,342	184,761,831	206,439,173	185,241,252	130,717,022	83,879,362	12
26,851,936	18,277,420	57,449,384	40,403,096	59,214,818	60,951,077	46,042,029	32,008,168	13
91,968,180	92,065,895	245,625,703	181,196,800	345,194,597	314,366,791	193,933,477	98,811,706	14
27,579,572	29,431,592	55,651,319	47,692,985	76,858,365	90,421,154	60,595,034	34,301,105	15
53,430,475	53,490,284	206,095,113	139,033,940	166,964,231	186,496,388	153,578,658	102,147,347	16
12,471,730	19,217,505	37,887,449	28,404,276	37,723,046	39,907,503	35,650,772	30,731,345	17
42,620,479	65,448,278	72,688,072	53,232,815	68,492,863	73,986,767	62,471,220	43,440,365	18
452,724,603	508,201,134	1,240,158,882	927,328,732	1,265,679,091	1,248,273,582	906,612,695	578,503,904	
25,400	37,434	39,363	40,352	41,409	42,075	42,308	42,437	19
1,528,689,201	1,893,125,774	2,164,687,636	3,506,758,049	3,902,676,977	4,026,469,311	4,232,022,088	4,348,328,000	20
37,097,718	43,503,459	46,793,251	42,686,166	39,107,893	34,698,767	26,396,812	21,099,582	21
79,884,282	109,659,088	103,131,132	122,476,822	137,855,151	115,229,511	85,993,206	67,722,105	22
188,733,494	261,888,654	458,008,891	493,599,754	534,106,045	454,231,650	358,549,382	293,390,415	23
131,034,785	180,542,259	422,581,205	389,503,452	433,077,113	380,723,411	321,025,588	256,668,375	24
1,224	1,674	1,687	1,684	1,637	1,509	1,386	–	25
111,532,347	154,895,584	177,187,436	215,808,520	222,422,815	224,089,539	215,818,096	–	26
426,296,792	580,094,167	719,305,441	748,710,836	836,729,851	792,701,493	720,468,361	–	27
1,228,362	1,936,674	2,282,292	3,489,183	3,653,411	2,872,929	1,977,441	–	28
20,356,952	27,416,285	44,536,833	51,723,199	58,268,981	54,719,259	49,088,310	–	29
12,096,134	18,099,906	35,945,316	36,453,709	40,085,140	39,125,515	35,367,068	–	30
304,904	263,648	230,129	197,561	164,552	133,266	126,633	44,189	31
38,030,353	23,583,491	9,407,021	13,477,663	13,699,647	14,803,334	16,189,074	17,960,650	32
11,919,339	12,616,927	12,516,503	22,837,720	27,464,158	27,155,766	28,064,762	27,003,210	33
10,377,847	12,210,723	12,400,226	22,817,276	26,944,369	25,836,466	26,535,387	25,337,031	34
22,297,186	24,827,656	24,916,729	45,654,996	54,408,527	52,992,232	54,600,149	52,340,241	35
13,286,102	16,486,778	14,828,454	14,117,099	18,987,751	17,550,585	17,769,690	15,216,213	36
11,846,257	16,406,670	14,903,447	15,474,732	20,338,949	18,895,972	18,542,037	15,879,943	37
25,132,359	32,893,448	29,731,901	29,591,831	39,326,700	36,446,557	36,311,727	31,096,156	38
34,280,669	35,624,074	28,567,545	41,770,480	49,046,588	43,666,866	47,134,652	44,912,972	39
32,347,265	33,085,350	27,773,668	41,117,175	48,007,097	44,067,907	47,540,555	45,311,899	40
66,627,934	68,709,424	56,341,213	82,887,655	97,053,685	87,734,773	94,675,207	90,224,871	41
8,446	10,699	11,207	10,722	9,848	9,351	9,300	9,077	42
33,905	38,552	41,577	42,239[5]	42,987	43,473	43,928	43,285	43
302,759	548,421	902,090	1,201,008	1,382,822	1,402,861	1,364,200	–	44
21,519	123,464	465,378	836,794	1,188,929	1,232,486	1,200,903	1,114,503	45

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[4] The figures for 1932 are subject to revision.

[5] Excluding U.S. lines of Canadian National Telegraphs.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Post Office—						
1	Revenue	$	803,637	1,344,970	2,515,823	3,421,192	5,993,343
2	Expenditure	$	994,876	1,876,658	3,161,676	3,837,376	4,921,577
3	Money orders issued	$	4,546,434	7,725,212	12,478,178	17,956,258	37,355,673
	Dominion Finance—						
4	Customs Revenue	$	11,841,105	18,406,092	23,305,218	28,293,930	46,053,377
5	Excise Revenue	$	4,295,945	5,343,022	6,914,850	10,318,266	14,010,220
6	Total Ordinary Revenue	$	19,335,561	29,635,298	38,579,311	52,514,701	80,139,360
7	Revenue per head	$	5·50	6·83	7·96	9·72	12·99
8	Total Ordinary Expenditure	$	15,623,082	25,502,554	36,343,568	46,866,368	67,240,641
9	Expenditure per head	$	4·44	5·88	7·50	8·67	10·90
10	Total Disbursements	$	19,293,478	33,796,643	40,793,208	27,982,866	83,277,642
11	Disbursements per head	$	5·48	7·79	8·42	10·73	13·49
12	Gross Debt	$	115,492,683	199,861,537	289,899,230	354,732,433	392,269,680
13	Assets	$	37,786,165	44,465,757	52,090,199	86,252,429	125,226,702
	Net Debt	$	77,706,518	155,395,780	237,809,031	268,480,004	267,042,978
	Provincial Finance—						
14	Revenue, Ordinary, Totals	$	5,518,946	7,858,698	10,693,815	14,074,991	23,027,122
15	Expenditure, Ordinary, Totals.	$	4,935,008	8,119,701	11,628,353	14,146,059	21,169,868
	Note Circulation—						
16	Bank Notes	$	20,914,637	28,516,692	33,061,042	50,610,205	70,638,870
17	Dominion Notes	$	7,244,341	14,539,795	16,176,316[5]	27,898,509[5]	49,941,426[5]
	Chartered Banks—						
18	Capital, paid-up	$	37,095,340	59,534,977	60,700,697	67,035,615	91,035,604
19	Assets	$	125,273,631	200,613,879	269,307,032	531,829,324	878,512,076
20	Liabilities to the public	$	80,250,974	127,176,249	187,332,325	420,003,743	713,790,553
21	Deposits payable on demand	$	–	–	–	95,169,631	165,144,569
22	Deposits payable after notice	$	–	–	–	221,624,664	381,778,705
	Totals, Deposits[2]	$	56,287,391	94,346,481	148,396,968	349,573,327	605,968,513
	Savings Banks—						
23	Deposits in Post Office	$	2,497,260	6,208,227	21,738,648	39,950,813	45,736,488
24	Deposits in Government Banks	$	2,072,037	9,628,445	17,661,378	16,098,144	16,174,134
25	Deposits in Special Banks	$	5,766,712	7,685,888	10,982,232	19,125,097	27,399,194
	Loan Companies[3]—						
26	Assets	$	8,392,464	73,906,638	125,041,146	158,523,307	232,076,447
27	Liabilities	$	8,392,464	71,965,017	123,915,704	158,523,307	232,076,447
28	Deposits	$	2,399,136	13,460,268	18,482,959	20,756,910	23,046,194
	Trust Companies—						
29	Shareholders' assets	$	–	–	–	–	–
30	Trust funds, liabilities	$	–	–	–	–	–
	Dominion Fire Insurance—						
31	Amount at risk, Dec. 31	$	228,453,784	462,210,968	759,602,191	1,038,687,619	1,443,902,244
32	Premium income for year	$	2,321,716	3,827,116	6,168,716	9,650,348	14,687,963
	Provincial Fire Insurance—						
33	Amount at risk, Dec. 31	$	–	–	–	–	–
34	Premium income for year	$	–	–	–	–	–
	Dominion Life Insurance[1]—						
35	Amount at risk, Dec. 31	$	45,825,935	103,290,932	261,475,229	463,769,034	656,260,900
36	Premium income for year	$	1,852,974	3,094,689	8,417,702	15,189,854	22,364,456
	Provincial Life Insurance—						
37	Amount at risk, Dec. 31	$	–	–	–	–	–
38	Premium income for year	$	–	–	–	–	–
	Business Transacted—						
39	Bank clearings.....Thousands of	$	–	–	580,644	1,871,062	3,950,701
40	Bank debits.......Thousands of	$	–	–	–	–	–
	Education—(Provincially-Controlled Schools only)						
41	Enrolment	No.	803,000	891,000	993,000	1,083,000	1,173,009
42	Average daily attendance	"	–	–	–	669,000	743,496
43	Number of teachers	"	13,559	18,016	23,718	27,126	32,250
44	Totals, Public Expenditure on	$	–	–	–	11,044,925	16,368,244

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[1] Figures do not include fraternal insurance. [2] Including amounts deposited elsewhere than in Canada from 1901. [3] Including Building Societies and Trust Companies (1871–1911). [4]The figures for 1932 are subject to revision. [5] As at June 30. [6] Active assets only. [7] Included in Post Office savings banks. [8] These figures are for 1924, the first year for which bank debits are available.

NOTE.

In the foregoing Summary, the statistics of immigration, fisheries (1871–1916), trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Office and Government savings banks

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

1911.	1916.	1921.	1926.	1929.	1930.	1931.	1932.[4]	
9,146,952	18,858,410	26,331,119	31,024,464	31,170,904	32,969,293	30,416,106	32,476,604	1
7,954,223	16,009,139	24,661,262	30,499,686	33,483,058	35,036,629	36,292,603	34,448,986	2
70,614,862	94,469,871	173,523,322	177,840,231	203,129,237	197,699,353	167,749,651	132,625,260	3
71,838,089	98,649,409	163,266,804	127,355,143	187,206,332	179,429,920	131,208,955	104,132,677	4
16,869,837	22,428,492	37,118,367	42,923,549	63,684,954	65,035,701	57,746,808	48,654,862	5
117,780,409	172,147,838	434,386,537	380,745,506	455,463,874	441,411,806	349,587,299	329,709,056	6
16·34	21·42	49·64	40·52	45·89	43·69	34·32	32·05	7
87,774,198	130,350,727	361,118,145	320,660,479	350,952,924	357,779,794	389,558,289	375,403,344	8
12·18	16·22	41·09	33·93	35·00	35·06	37·55	35·73	9
122,861,250	339,702,502	528,283,199	355,186,423	388,805,953	398,176,246	440,008,855	450,955,541	10
17·04	42·27	60·11	37·59	38·78	39·01	42·41	42·92	11
474,941,487	936,987,802	2,902,482,117	2,768,779,184	2,647,033,973	2,544,586,411	2,610,265,698	2,831,743,563	12
134,899,435	321,831,631	561,603,133[6]	379,048,085[6]	421,529,268[6]	366,822,452[6]	348,653,762[6]	455,897,390	13
340,042,052	615,156,171	2,340,878,984	2,389,731,099	2,225,504,705	2,177,763,959	2,261,611,936	2,375,846,172	
40,706,948	50,015,795	102,030,458	146,450,904	183,598,024	188,154,910	179,143,480	–	14
38,144,511	53,826,219	102,569,515	144,183,178	177,542,192	184,804,203	190,754,202	–	15
89,982,223	126,691,913	194,621,710	168,885,995	178,291,030	159,341,085	141,969,350	132,165,942	16
99,921,354	176,816,006	271,531,162	190,004,824	204,381,409	174,616,019	153,079,362	165,878,510	17
103,009,256	113,175,353	129,096,339	116,638,254	137,269,085	144,560,874	144,674,853	144,500,000	18
1,303,131,260	1,839,286,709	2,841,782,079	2,864,019,213	3,528,468,027	3,237,073,853	3,066,018,472	2,869,429,779	19
1,097,661,393	1,596,905,337	2,556,454,190	2,604,601,786	3,215,503,098	2,909,530,263	2,741,554,219	2,546,149,789	20
304,801,755	428,717,781	551,914,643	553,322,935	696,387,381	622,895,347	578,604,394	486,270,764	21
568,976,209	780,842,383	1,289,347,063	1,340,559,021	1,479,870,058	1,427,569,716	1,437,976,749	1,376,325,128	22
980,433,788	1,418,035,429	2,264,586,736	2,277,192,043	2,696,747,857	2,516,611,587	2,422,834,828	2,256,639,530	
43,330,579	40,008,418	29,010,619	24,035,669	28,375,770	26,086,036	24,750,227	23,919,677	23
14,673,752	13,519,855	10,150,189	8,794,875	[7]	[7]	[7]	[7]	24
34,770,386	40,405,037	58,576,775	67,241,344	70,809,603	68,846,366	69,820,422	68,683,324	25
389,701,988	70,872,297	96,698,810	120,321,095	135,358,095	143,308,774	147,921,556	–	26
389,701,988	70,872,297	95,281,122	119,455,317	134,654,166	142,178,240	146,858,594	–	27
33,742,513	8,987,720	15,868,926	21,316,150	29,602,789	31,581,913	30,823,662	–	28
–	7,826,943	10,237,930	13,195,277	14,669,497	14,952,282	15,459,347	–	29
–	47,162,220	87,811,965	157,756,647	234,470,989	231,691,422	256,876,037	–	30
2,279,868,346	3,720,058,236	6,020,513,832	8,051,444,136	9,431,169,594	9,672,996,973	9,544,641,293	9,254,378,288	31
20,575,255	27,783,852	47,312,564	52,595,923	56,112,457	52,646,520	50,342,669	46,933,270	32
–	849,915,678	1,269,764,435	1,286,255,476	1,305,123,764	1,290,302,102	1,280,923,112	1,228,396,488	33
–	3,902,504	5,545,549	6,068,701	5,400,527	5,505,600	6,848,712	5,318,814	34
950,220,771	1,422,179,632	2,934,843,848	4,610,196,334	6,157,262,207	6,492,428,676	6,622,556,490	6,471,588,455	35
31,619,626	48,093,105	99,015,081	160,746,413	210,728,479	220,523,727	225,152,008	216,133,010	36
–	348,097,229	222,871,178	147,821,972	202,961,007	190,589,965	202,094,301	178,120,314	37
–	5,311,003	4,389,008	3,991,126	5,310,568	5,032,428	5,178,615	4,745,111	38
7,346,381	10,315,853	16,811,287	17,715,099	25,105,188	20,091,874	16,827,603	12,914,155	39
–	–	27,157,474[8]	30,358,034	46,670,482	37,491,302	31,586,468	25,844,288	40
1,356,879	1,622,351	1,869,643	2,063,498	2,156,549	2,192,017	–	–	41
870,801	1,140,793	1,335,454	1,547,992	1,644,786	1,688,918	–	–	42
40,516	50,307	56,607	63,840	68,888	69,820	–	–	43
37,971,374	57,362,734	112,976,543	122,701,259	130,658,883	135,901,082	–	–	44

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relate to the fiscal years ended June 30 up to 1906, and from then on to the years ended Mar. 31. Agricultural, dairying, fisheries (1922–26), mineral, manufacturing, banking, insurance, loan and trust companies statistics relate to the calendar years and railway statistics to the years ended June 30, 1871–1916, and to the calendar years 1921 and 1924–28. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the calendar years for other lines.

ERRATA.

P. 2. Total land and fresh water area of Cape Breton Island should be given as 3,970 square miles in line 9 of the second paragraph. This correction applies also to page 18, line 2.

P. 34. Line 11. "Pardo" should be "Pardoe".

P. 72. Table 1. "The Earl of Minto, K.C.M.G." should read "G.C.M.G.".

P. 84. Table 9. The population of the electoral district of Argenteuil is 18,976, not 78,976.

P. 174. Middle Paragraph. Deaths in the 9 provinces in 1927 numbered 105,292 instead of 105,136 as given in the text.

CHAPTER I.—PHYSIOGRAPHY.

PART I.—GEOGRAPHICAL FEATURES.[1]

Situation.—The Dominion of Canada comprises the whole northern half of the North American continent except the United States territory of Alaska, and the Coast of Labrador, a dependency of the Colony of Newfoundland. It also includes the Arctic archipelago between Davis strait and the 141st meridian.

The Dominion is bounded on the west by the Pacific ocean and Alaska; on the south by the 49th parallel, the Great Lakes, the St Lawrence river and additional lines set out by the Ashburton Treaty, signed Aug. 9, 1842; and on the east by the Atlantic ocean, the gulf of St. Lawrence, the territory of the Coast of Labrador (as defined by the award of the Privy Council, Mar. 1, 1927), and Davis strait. As regards the far north, Canada includes all the lands in the area bounded on the east by a line passing midway between Greenland and Baffin, Devon and Ellesmere islands to the 60th meridian of longitude, following this longitude to the pole, and on the west by the 141st meridian of longitude, following this longitude to the pole. The southernmost point is Middle island in lake Erie, in north latitude 41° 41′, while from east to west the Dominion extends from about west longitude 57°—at the southernmost point of the boundary with the Coast of Labrador—to west longitude 141°, the boundary with Alaska. Canadian territory thus extends over 84° of longitude and 48° of latitude.

Area.—The area of the Dominion (as revised on the basis of the results of recent explorations in the north) is 3,684,463 square miles, a figure which may be compared with that of 3,738,395 square miles for the United States and its dependent territories, 3,776,700 the total area of Europe, 2,974,581 the total area of Australia, 4,277,655 the total area of China inclusive of dependencies, 3,275,510 the area of Brazil, 1,805,332 the area of India, 121,633 the area of the British Isles and 13,355,426 the area of the British Empire. By comparison with the last two figures, Canada is seen to be over 30 times as large as the British Isles and to comprise over 27 p.c. of the total area of the British Empire.

Political Subdivisions.—Canada is divided from east to west into the following provinces: the Maritime Provinces of Prince Edward Island, Nova Scotia and New Brunswick, all three comparatively small in area; Quebec, covering a strip south of the St. Lawrence and the whole territory north of the St. Lawrence and east of the Ottawa to Hudson strait, less the territory of the Coast of Labrador; Ontario, extending northward from the Great Lakes to Hudson bay; Manitoba, Saskatchewan and Alberta, the provinces of the interior continental plain, extending from 49° to 60° north latitude; and British Columbia, the province of the western mountain and Pacific Coast region, also extending from 49° to 60°. North of the 60th parallel of latitude, the country is divided into the Yukon Territory and the Northwest Territories, the latter area composed of the provisional districts of Mackenzie, Keewatin and Franklin.

Prince Edward Island.—This, the smallest province of the Dominion, lies in the southern bend of the gulf of St. Lawrence and is separated from the mainland by Northumberland strait. It is about 120 miles in length and, with an average width of 20 miles, covers an area of 2,184 square miles, approximately 200 square miles more than the State of Delaware. The island is almost trisected by the deep indentations of Malpeque bay north of Summerside and by the mouth of the Hillsborough river at Charlottetown, which nearly meets Tracadie bay on the north side. Its rich red soil and red sandstone formations are a distinct feature, and no point in the island attains a greater altitude than 306 feet above sea-level. A climate tempered by the surrounding waters of the gulf and yet free from the rigours of Atlantic storms, combined with a fertile soil and sheltered harbours, offers great inducements to the pursuits of agriculture and fishing. The province is noted for its relative predominance in the fox-farming industry, its lobster canneries, and its production of oats and potatoes.

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[1] Revised by F. H. Peters, Director of the Topographical Survey, Department of the Interior, Ottawa.

Nova Scotia.—The province of Nova Scotia is 381 miles in length by from 50 to 105 miles in width, a long, narrow strip of land lying parallel to the Maine and New Brunswick coast and joined to the latter province by the isthmus of Chignecto. It includes at the north the island of Cape Breton, which is separated from the mainland by the narrow strait of Canso. The total area of the province is 21,068 square miles, a little over 2,000 square miles less than the combined area of Belgium and Holland. Cape Breton island, south of the main entrance to the gulf of St. Lawrence and sheltering Prince Edward island from the Atlantic, is roughly 100 miles in length with an extreme breadth of 87 miles. Its area of 3,120 square miles encloses the salt-water lakes of Bras d'Or, connected with the sea at the north by two natural channels and at the south by the St. Peters ship canal. The ridge of low mountainous country running through the centre of the Nova Scotia mainland, the highest altitude of which is less than 1,500 feet, divides it roughly into two slopes. That facing the Atlantic is generally rocky and open to the sweep of Atlantic storms, but the other, facing the bay of Fundy and Northumberland strait, consists for the most part of fertile plains and river valleys noted for the general farming and fruit-farming districts which produce the famous Nova Scotian apples. The Atlantic coast is deeply indented with numerous excellent harbours many of which provided splendid homes and refuges for the old sail fishing fleets.

New Brunswick.—With a total area of 27,985 square miles, New Brunswick may be compared in size to Scotland with its area of 30,405 square miles. The province is very compact and in shape nearly rectangular, with its depth not greatly exceeding its width. The conformation is in general undulating and of low relief. In the southeastern half of the province the ground elevation does not generally exceed 500 feet above sea-level except for a narrow strip in the south which produces the highlands bordering the bay of Fundy east of Saint John. In the northwestern half the ground elevation is in general from 500 to 1,000 feet above sea-level and reaches its greatest elevation of over 2,700 feet in Northumberland county northeast of Grand Falls. The St. John, rising in the sister province of Quebec and the bordering State of Maine, is a river with many distinctive beauties, while its length of nearly 400 miles makes it quite noteworthy as to size. In the northeastern half of the province there are very extensive areas of Crown lands still carrying valuable stands of merchantable timber. While New Brunswick is essentially a part of the mainland, the bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south and Passamaquoddy bay at the southwest, provide the province with a very extensive sea-coast. To its southwest is a group of islands belonging to the province, the most important of which are Grand Manan, Campobello, and the West Isles. New Brunswick has been called the best watered country in the world; numerous rivers provide access to extensive lumbering areas in its interior and to many of the most attractive hunting and fishing resorts in the Dominion.

Quebec.—Quebec might with considerable accuracy be included among the Maritime Provinces, for the gulf of St. Lawrence is really a part of the Atlantic, and altogether salt water washes the coasts of the province for a length of over 2,700 miles. Besides including a narrow strip of land between the St. Lawrence and the International and New Brunswick boundaries, Quebec extends northward from the St. Lawrence and Ottawa rivers to Labrador and Hudson strait, covering over 17° of latitude and an area of 594,534 square miles, about 38 p.c. of which lies south of the isotherm of 60° F. mean July temperature.[1] The combined areas of France, Germany and Spain are about 2,600 square miles less than the area of Quebec. The conformity of the surface of Quebec is in general that characteristic of the Precambrian rocks, being quite even in general but much diversified by minor hills and hollows. North of the St. Lawrence the land takes the form of a ridge, parallel to the river and rising from sea-level to the Height of Land at an elevation of from 1,000 to 3,000 feet and then descending gently again to the sea-level of Hudson bay to the northwest; but to the northeast the ridge carries its height to end abruptly in the high headlands of Labrador. South of the river, the area is comprised of the St. Lawrence Lowlands between Montreal and Quebec which, rising to the east, produce the highest elevation in the province, of about 4,200 feet, in the Gaspé peninsula. With the exception of the treeless zone extending somewhat south of Ungava bay the whole of the province supports a valuable tree growth varying from the mixed forest in the southwest to the eastern and northern coniferous in the areas of higher latitude. Apart from its importance as the threshold of Canada and the gateway through which ocean vessels must pass on their way to the interior of the continent Quebec is also noted for its natural resources. The extensive timber limits of its northern areas form the basis for the great pulp and paper industry of the present and the future. Its rivers, many of them as yet comparatively unknown, may be harnessed to supply over one-third of the electric power available in Canada. Its mineral deposits, particularly those of asbestos, have long been known for their quality and extent, while more recent developments of copper and gold deposits in Rouyn and the neighbouring townships in the western part have brought the province up to second place in mineral production in Canada. The fisheries of the St. Lawrence river and gulf are well known. Agriculturally, the climate and soil of the upper St. Lawrence River valley and the plains of the Eastern Townships are eminently adapted to general farming operations.

Ontario.—The province of Ontario is the section of the Dominion contained between the great international lakes and Hudson bay and between the western boundary of Quebec and the eastern limits of Manitoba. Although generally regarded as an inland province, Ontario has a fresh-water shore line on the Great Lakes of more than 2,362 miles and on the north a salt-water shore line of about 680 miles with a tidal port at Moosonee at the southern end of James bay. The southernmost point of Ontario, which is also the southernmost point of the Dominion, is in north latitude 41° 41′—a little further south than the northern boundary of the State of California—and its most northern, in north latitude 56° 48′. The total area comprised within its limits, of which about 82 p.c. lies south of the isotherm of 60° F. mean July temperature,[1] is 412,582 square miles, of which its fresh-water area of 49,300 square miles forms the unusually large proportion of 12 p.c. The province is over 17,000 square miles greater in area than are France and Germany together, and when compared with the States to the south, Ontario is found to be almost equal in extent to the combined areas of the six New England States, together with New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan and Wisconsin. Excepting in the southwestern part, the surface conformity of Ontario is influenced by the characteristics of the Precambrian rocks. In northern Ontario a large area with elevations of 1,000 feet or over adjoins the north shore of the Great Lakes and going north a short distance over the Height of Land the slope descends very gently to Hudson bay, which has a wide marginal strip less than 500 feet above sea-level. The highest point in Ontario is 2,120 feet, on the promontory at the northeastern corner of lake Superior. The whole province supports a valuable covering of trees, varying from south to north, from the mixed forest to the eastern and northern coniferous. Many varieties of climate and soil are encountered, from the distinctively southern conditions found along the shores of lake Erie to the very different ones of Hudson and James bays. Ontario, of all the provinces of Canada, is the centre of the country's manufacturing life, owing to its abundant water-power resources and its proximity to the coal fields of Pennsylvania, but the many resources of its rural districts are not on this account neglected. Mining is an important industry in the Sudbury, Porcupine, and Kirkland Lake districts, the nickel coming from the Sudbury field amounting to 90 p.c. of the world production, while, as regards gold production the province ranks first in Canada. Fruit farming in the Niagara district and general farming throughout the entire southern part of the province are carried on extensively under unusually favourable conditions, while timber, pulp and furs are among the most important products of more northern parts.

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[1] The isotherm of 60° F. mean July temperature is generally considered as the northern limit for the economic production of cereals.

Manitoba.—Manitoba, the most easterly of the Prairie Provinces, and also the oldest of them in point of settlement, includes the area between Ontario on the east and Saskatchewan on the west. Its southerly limit is the International Boundary, while its northerly boundary is the 60th parallel of latitude and Hudson bay, where its coast of over 400 miles includes the harbour and port of Churchill. The total area of Manitoba, of which about 56 p.c. lies south of the isotherm of 60° F. mean July temperature,[1] is 246,512 square miles—3,246 square miles greater than twice the total area of the British Isles. The conformity of the surface of Manitoba is quite even; commencing on the north with a strip bordering on Hudson bay perhaps 100 miles wide and less than 500 feet in elevation, the surface rises gradually towards the west and south. The bulk of the province has an elevation of between 500 and 1,000 feet, with the greatest height of 2,727 feet attained in Duck mountain, northwest of lake Dauphin. East and north of lake Winnipeg the Precambrian formation intrudes, producing a rock formation, but the remainder of the province is overlain by very fertile soil of great depth. The treeless prairie belt extends into the southwest corner of the province, but the greater portion of the developed area is in the grove belt, characterized by groves of poplar interspersed with open prairie patches; to the north there are great areas of northern mixed forest, blending into the northern coniferous, which thin again to some treeless areas along the coast line farther north. The province has been regarded as typically agricultural, its southern lands being specially adapted to this form of industry. Its northern districts, however, are of importance in the production of timber and also contain large mineral deposits particularly of copper-gold ore. About three-fifths of the area of this province is underlain by the Precambrian rocks which have been found so rich in minerals in northern Ontario and Quebec.

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[1] See footnote, p 3.

Saskatchewan.—The central prairie province lies between Manitoba and Alberta; it reaches to the International Boundary on the south and its northerly limit is the 60th parallel of latitude, which divides it from the Northwest Territories. The area, of which about 89 p.c. lies south of the isotherm of 60° F. mean July temperature,[1] is 251,700 square miles, approximating that of Manitoba, and greater by 5,000 square miles than the combined areas of the British Isles and Norway. With the exception of a point of the Precambrian rocks jutting in from the east at the Height of Land, well to the north, and again covering a narrow strip along the northern boundary, the whole of the province is overlain by generally fertile soil of great depth. The greater part of the developed area in the south is comprised in the great treeless prairie belt, fringed to the north with a zone of poplar, interspersed with open prairie, which gradually changes into the northern mixed forest covering all the northerly parts. Apart from the southern prairies, which are extraordinarily smooth, the surface topography is generally of low relief and with a general rising slope towards the west. The bulk of the province has a general elevation of between 1,000 and 2,000 feet, with the maximum elevation of about 4,500 feet on the eastern point of the Cypress hills in the southwest corner. The climate is quite different from that of Eastern Canada, with less precipitation and perhaps slightly more severe features than are encountered in many other parts of the country, but is nevertheless most favourable to plant and animal growth. The northern districts, abundantly watered by lakes and rivers, are rich in timber resources and have prospective mineral wealth, while the southern plains include a large portion of the wonderful western wheat fields.

Alberta.—Lying between Saskatchewan on the east, and the Rocky mountains and the 120th meridian on the west, and bounded on the north and south by the Northwest Territories and the United States respectively, is the province of Alberta. Its area is slightly greater than that of Saskatchewan or Manitoba, comprising a total of 255,285 square miles, of which about 90 p.c. lies south of the isotherm of 60° F. mean July temperature.[1] The area of the province is over 8,600 square miles greater than the combined areas of the British Isles and Norway. Like Saskatchewan, the southern part of the province is comprised in the dry treeless prairie belt, changing to the north into a zone of poplar interspersed with open prairie, which again gives way to the northern mixed forest covering the northerly parts. The Precambrian rocks just touch Alberta at its northeast corner, so that excepting the fringe of mountainous country on its western border the whole of the province is overlain by arable soil of great depth. Alberta has two marked features: (1) the great valley of the Peace river, which has already resulted in the extension of settlement farther north than in any other part of Canada, and (2) the wonderful grazing lands in the foothills district, which, rising sharply on the west, commences the ascent which continues to the very peaks of the Rocky mountains. The southern half of the province, rising toward the west, lies at a general elevation of from 2,000 to 4,000 feet; but in the northern half the slope descends until elevations of well under 1,000 feet are reached at lake Athabaska in the northeast corner. Mount Columbia, with an elevation of 12,294 feet, is the highest point in the province. Considerable coal and oil mining are carried on, lumbering is important in the more mountainous western parts and in the north, while some ranching is still pursued in the less populous sections. The climate of Alberta is a particularly pleasant one, cooler in summer than more eastern parts of the country and tempered in winter by the "Chinook" winds.

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[1] See footnote, p. 3.

British Columbia.—British Columbia, the most westerly province of the Dominion, comprises an area of 355,855 square miles, slightly less than three times the area of the British Isles. The predominant feature of the province is the parallel ranges of mountains which cover all of it except the northeast corner and produce a conformation characterized by high mountain ranges interspaced with valleys, many of which are extremely fertile, with climatic conditions well adapted to mixed agriculture or fruit growing. Apart from the smoother area in the northeast corner which extends up from the "Peace River Block" there is another notably large area of smoother terrain in the Stuart Lake district traversed by the Canadian National Railway running west from Fort George to Prince Rupert. The highest point in the province is Mount Fairweather (15,287 feet). The shore line of the Pacific is deeply indented with many inlets ideal for harbourage and with wonderful scenic aspects. With two ocean ports served by transcontinental railways British Columbia is well situated and equipped to carry on trade with the Orient, while its great stands of fir, spruce and cedar timber constitute a natural resource of great value. The province includes many islands of the Pacific, notably the Queen Charlotte group and Vancouver island; the latter, with an area of about 13,500 square miles, is noted for its temperate climate and abundant natural resources. The mines, timber, fisheries and agricultural resources of the province are remarkable for their quality and extent. The boundaries of the province extend from Alberta on the east to the Pacific ocean and Alaska on the west, and from the International Boundary northward to the Yukon.

Yukon and Northwest Territories.—The vast area of 1,516,758 square miles is included within the boundaries of Canada's northern subdivisions, the Yukon Territory and the three provisional districts of the Northwest Territories. This is over twelve times the area of the British Isles, nearly half the area of the United States, and more than the combined areas of the Argentine Republic and Chile in South America. The northern territories are as yet, in parts, unexplored and excepting the main through water routes are still in many places unmapped in any accurate way. The territories are known to include mighty rivers like the Mackenzie and the Yukon and great inland bodies of water such as Great Slave and Great Bear lakes; but with the present paucity of accurate knowledge the potentialities of this great area are at present unknown. The many general indications of mineral wealth in the country together with the recent mineral discoveries in the Great Bear Lake-Coppermine River area suggest that the future may well reproduce the great gold rush to the Yukon in 1897. Because a large portion lies within the Arctic circle the tendency has been to associate with the Northwest Territories thoughts of ice and snow, but as our knowledge is increased the argument steadily gains more weight that what have been regarded in the past as the great 'barren lands' of the north are more appropriately described as our great northern prairies. The opening of the port of Churchill, making the Hudson Bay coast of the district of Keewatin readily approachable, adds considerably to the transportation facilities, which previously have been confined to a regular steamboat summer route down the Mackenzie river. In the future it is likely that travel and transport by air will have a great influence in the further development of these territories, while a net of established radio stations already brings a large area within the realm of quick communication. The production of minerals in the Yukon in 1931 was valued at $2,145,347, while the value of the production of furs in the Northwest Territories and Yukon in the 1930-31 season was $2,090,961.

Summary of Land and Water Area.—The total land and fresh-water area of the Dominion, together with its distribution by provinces and territories, is shown in Table **1.**

1.—Land and Fresh-Water Area of Canada, by Provinces and Territories, as in 1933.[1]

Province or Territory.	Land.[2]	Fresh Water.[2]	Total.[2]	Per Cent of Total Area.
	sq. miles.	sq. miles.	sq. miles.	
Prince Edward Island	2,184	–	2,184	0·1
Nova Scotia	20,743	325	21,068	0·6
New Brunswick	27,710	275	27,985	0·8
Quebec	523,534	71,000	594,534	16·1
Ontario	363,282	49,300	412,582	11·2
Manitoba	219,723	26,789	246,512	6·7
Saskatchewan	237,975	13,725	251,700	6·8
Alberta	248,800	6,485	255,285	6·9
British Columbia	349,970	5,885	355,855	9·7
Yukon	205,346	1,730	207,076	5·6
Northwest Territories—				
Franklin	546,532	7,500	554,032	15·0
Keewatin	218,460	9,700	228,160	6·2
Mackenzie	493,225	34,265	527,490	14·3
Totals	**3,457,484**	**226,979**	**3,684,463**	**100·0**

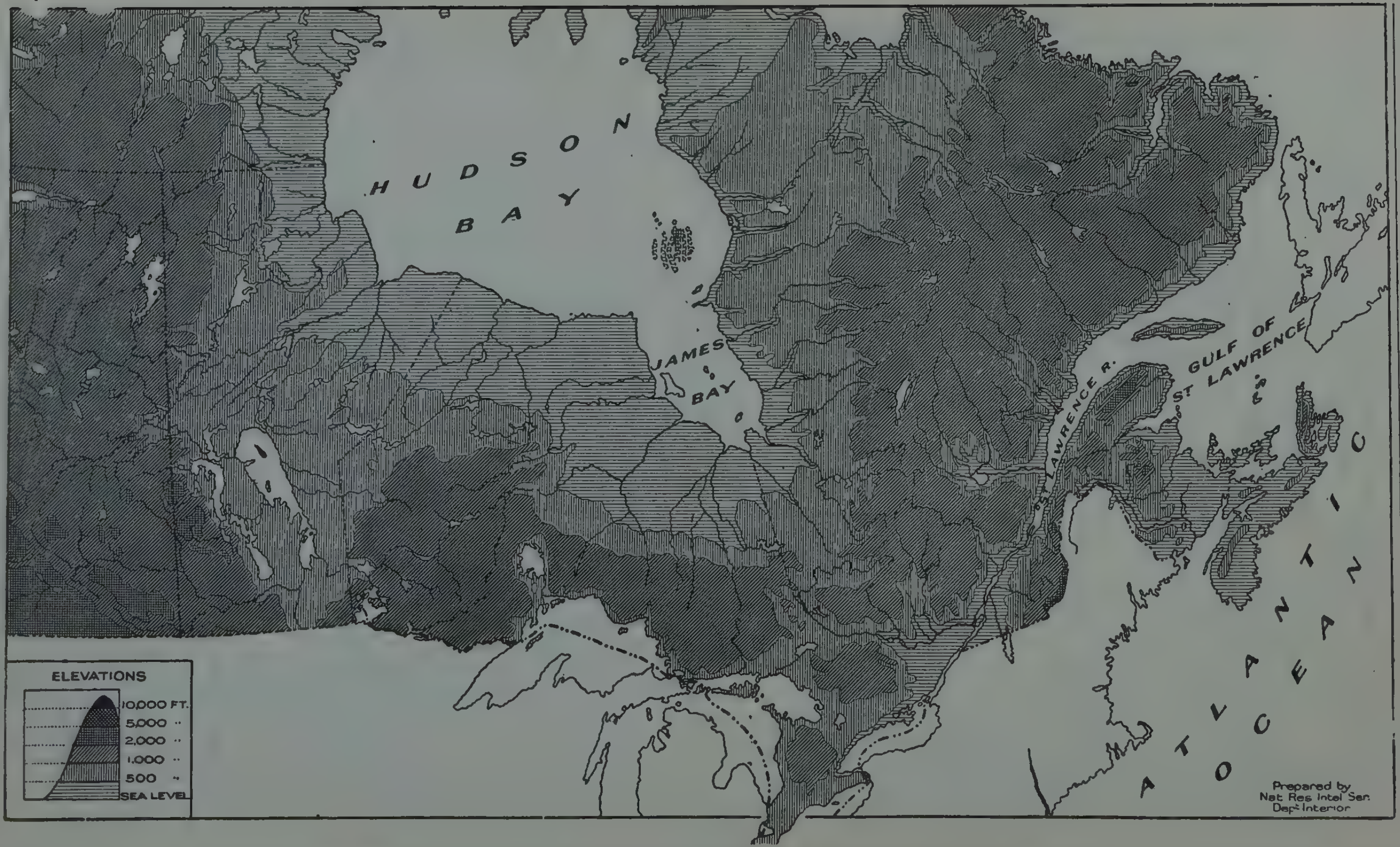
[1] The salt-water areas of Canada are excluded. [2] Approximate.

Section 1.—Orography.

The conformation of the present surface of the North American continent admits of its apportionment, in Canada, into several orographic divisions. The exposed surface of the old Precambrian continent forms one of the largest divisions and has been called the Canadian Shield, the Archæan Peneplain and in its southern portion, the Laurentian Highland. The mountainous country of the west constitutes the Cordilleras, while the mountains of eastern United States, in their continuation across the border, form the Appalachian Highland of Eastern Canada. The Great Plains, with various subdivisions, occupy the area between the mountainous area of the west and the great roughened surface of the Canadian Shield. The St. Lawrence Lowlands lie between the Laurentian and Appalachian Highlands. Within the borders of the Canadian Shield an area on the southern margin of Hudson bay has been referred to as the "clay belt". It occupies a part of the basin that during the glacial period was submerged and covered with a coating of clay which smoothed over its inequalities and concealed most of the underlying rocks. Since its emergence the surface has been but slightly altered by drainage channels cut across it.

Orographical maps of Eastern and Western Canada, showing elevations above sea-level, will be found on pp. 8 and 10 of this volume.

Canadian Shield.—The portion of the Precambrian continent whose exposed surface still forms a large part of Canada has an area of about two and a half million square miles. Its northern border crosses the Arctic archipelago and the eastern lies beyond Baffin island and Labrador and reaches the depressed area occupied by


HUDSON BAY
JAMES BAY
GULF OF ST LAWRENCE
ST LAWRENCE R.
ATLANTIC OCEAN
ELEVATIONS
10,000 FT.
5,000 "
2,000 "
1,000 "
500 "
SEA LEVEL
Prepared by
Nat Res Intel Ser.
Dept Interior

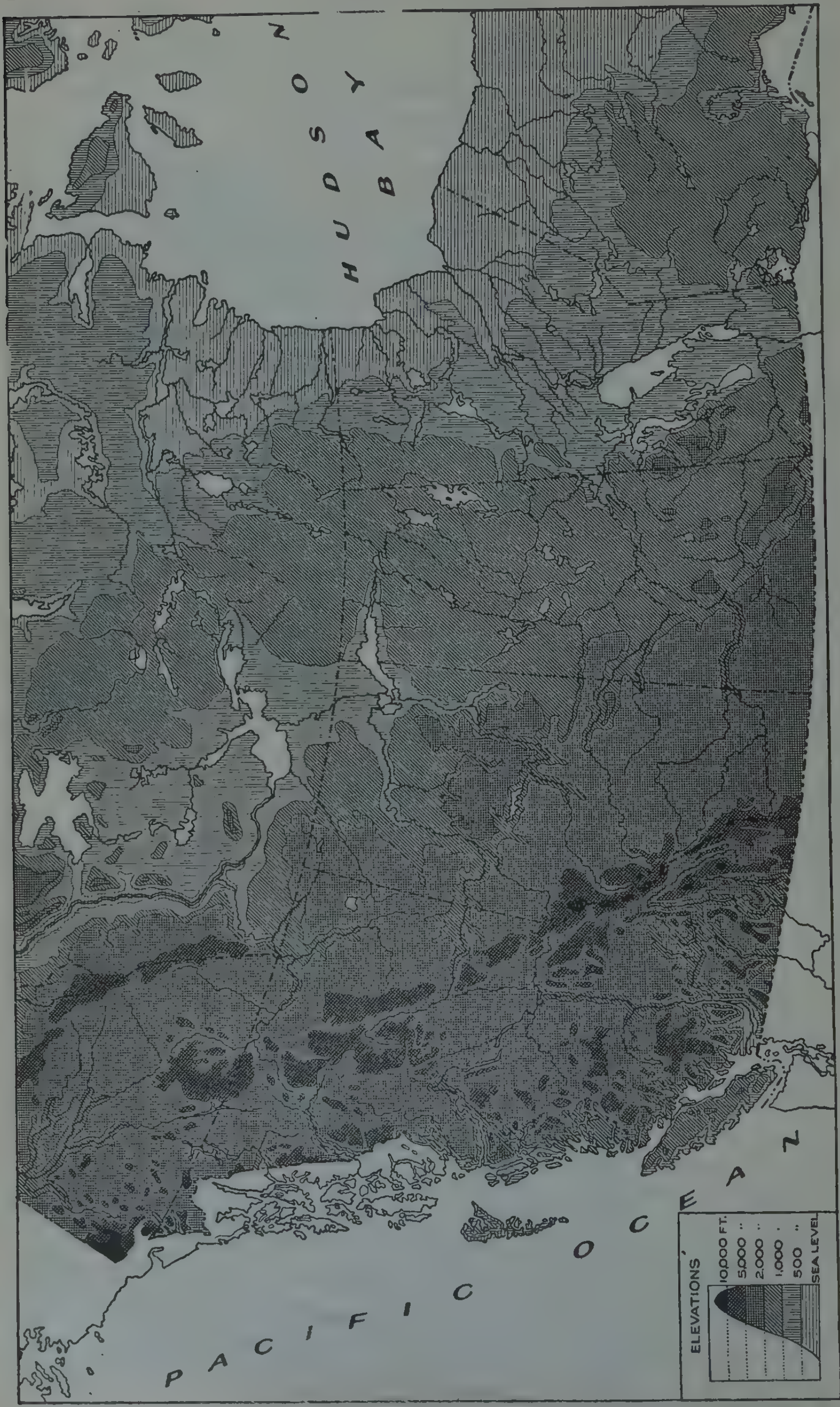
OROGRAPHY OF EASTERN CANADA AND LABRADOR.

the St. Lawrence river, a short spur or point crossing this valley at the outlet of lake Ontario to join the Adirondack mountains in New York. The southern boundary runs from this spur west to Georgian bay, skirts the north shore of lake Huron and sweeps almost around the ancient depressed area occupied by lake Superior. The western edge, from the lake of the Woods and lake Winnipeg, bears northwest to the western end of lake Athabaska, and passes through the basins occupied by Great Slave and Great Bear lakes, reaching the Arctic ocean east of the Mackenzie River delta. In detail, the surface features of the Canadian Shield are irregular, but, viewed broadly, it has the conformation of a great plain, depressed toward the centre and in the north and slightly elevated along the eastern and southern borders where it presents a rather steep outward slope. The general elevation in the eastern portion is under 2,000 feet and over the larger part of the plain is about 1,000 feet. The highest portion is along the northeastern margin, where it presents a steep face to the sea, rising to a maximum altitude of about 6,000 feet.

Appalachian Region.—The continuation of the Green mountains of Vermont into Canada may be traced in the Notre Dame mountains, which approach the St. Lawrence northeast of Quebec and, continuing with more easterly trend, form the highland of the Gaspé peninsula. Over a large part of the region, these hills hardly attain the dignity of mountains, but peaks rising more than 3,500 feet above the nearby coast are found in the Gaspé peninsula. The continuation of the White mountains of New Hampshire is found in the highlands of Maine and New Brunswick, the continuity being shown quite plainly by the rock-folding and other evidences of the great earth movements which caused the topography. An additional ridge apparently forms the present province of Nova Scotia, and although the highlands of that province do not attain elevations of even 1,500 feet, the rock structure indicates that it was a mountainous country at no very remote geological period.

St. Lawrence Lowlands.—The southern interior of the continent consists of a plain of low relief, bordered on the east by the Appalachian mountains, on the west by the Cordilleran Mountain systems, and on the north by the Laurentian plateau. This plain, in its Canadian portion, is known as the St. Lawrence Lowlands, and extends from a short distance below Quebec city to lake Huron, south of Georgian bay, having a length of 600 miles and an area of 35,000 square miles. To the northeast it becomes reduced in width, and in the vicinity of Quebec is represented by a narrow plateau or shelf on each side of the St. Lawrence river.

Great Plains.—A great area, including diverse features, lies to the east of the Cordilleras. The portion that is included under the term Great Plains extends from the southwestern edge of the ancient surface, forming the Canadian Shield, to the eastern edge of the mountainous region of the Cordilleras. This area is characteristically different from other parts of Canada in that any exposure of surface rock is rare. Generally, it is overlain by great depths of soil, through which the streams have cut themselves down into deep coulées and the rivers into deep wide valleys. Lakes of any considerable extent are infrequent and usually quite shallow; in the dry prairie section there are many places where the absorption from the broad and shallow bodies of water is so great that they have little or no outflowage and consequently the concentration of mineral salts in the water makes it unfit for domestic use. The terrain is generally smooth or gently undulating and with elevations of from 600 to 3,500 feet has a general upward slope toward the south and west where, rising more sharply in the foothills, the real ascent to the high mountains commences.


HUDSON BAY
PACIFIC OCEAN
ELEVATIONS
10,000 FT.
5,000 "
2,000 "
1,000 "
500 "
SEA LEVEL

OROGRAPHY OF WESTERN CANADA.

Cordilleran Region.—The western part of the American continent is more or less mountainous. The Andean chain, which extends throughout the length of South America and broadens out in the United States has, in Canada, an average width of about 475 miles. This region, covering about 530,000 square miles, is the most elevated in the Dominion, many of the summits reaching heights of 10,000 feet, with occasional peaks over 13,000 feet above sea-level. The mountainous tract forming the Cordilleras can be divided broadly into three parallel bands: a series of plateaus and mountains, comprised in the Columbia, Interior, Cassiar, and Yukon systems, forming the central part, referred to as the Central Belt; another series of parallel ridges east of the central plateaus, formed of fault rocks and folds and including the Rocky and Arctic systems, known as the Eastern Belt; and a third division between the plateau country and the Pacific, composed of the Pacific and Insular systems, called the Western Belt.

Table **2** shows the principal named Canadian Cordilleran peaks exceeding 11,000 feet in elevation.

2.—Mountain Peaks over 11,000 feet in Elevation, with Latitude and Longitude.

Province and Mountain Peak.	Elevation.	N. Lat.		W. Long.		Range.
	ft.	°	′	°	′	
Alberta—						
Alberta	11,874	52	14	117	36	Rocky Mts.
Alexandra[1]	11,214	51	59	117	12	"
Assiniboine[1]	11,870	50	56	115	42	"
Athabaska	11,452	52	07	117	11	"
Coleman	11,000	52	06	116	55	"
Columbia[1]	12,294	52	09	117	27	"
Deltaform[1]	11,235	51	18	116	15	"
Diadem	11,060	52	19	117	00	"
Forbes	11,902	51	48	116	56	"
Fryatt	11,026	52	33	117	54	"
Hector	11,135	51	34	116	15	"
Hungabee[1]	11,457	51	20	116	17	"
Joffre[1]	11,316	50	32	115	12	"
King Edward[1]	11,400	52	10	117	30	"
Kitchener	11,500	52	13	117	19	"
Lyell[1]	11,495	51	58	117	06	"
Lefroy[1]	11,230	51	22	116	17	"
Lunette[1]	11,150	50	52	115	39	"
Sir Douglas[1]	11,174	50	43	115	20	"
Snow Dome[1]	11,340	52	11	117	19	"
Stutfield	11,320	52	15	117	29	"
Temple	11,636	51	21	116	15	"
The Twins	11,675 12,085	52	13	117	12	"
Victoria[1]	11,365	51	23	116	18	"
Wilson	11,000	51	58	116	45	"
Woolley	11,170	52	18	117	25	"

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[1] This peak is on the interprovincial boundary between Alberta and British Columbia.

2.—Mountain Peaks over 11,000 feet in Elevation, with Latitude and Longitude—con.

Province and Mountain Peak.	Elevation.	N. Lat.		W. Long.		Range.
	ft.	°	′	°	′	
British Columbia—						
Bush	11,000	54	00	120	15	Rocky Mts.
Bryce	11,507	52	03	117	20	“
Clemenceau	12,001	–	–	–	–	“
Chown	11,500	53	26	119	26	“
Delphine	11,076	50	28	116	25	Selkirk Mts.
Fairweather[1]	15,287	58	54	137	31	St.EliasMts.
Farnham	11,342	50	29	116	27	Selkirk Mts.
Goodsir	11,676	51	12	116	24	Rocky Mts.
Hasler	11,113	51	09	117	25	Selkirk Mts.
Huber	11,051	51	22	116	18	“
Jumbo	11,217	50	24	116	32	Rocky Mts.
King George	11,226	50	36	115	24	“
Resplendent	11,240	53	05	119	07	“
Robson	12,972	53	07	119	08	“
Root[1]	12,860	58	59	137	30	St.EliasMts.
Selwyn	11,013	51	09	117	24	Selkirk Mts.
Sir Alexander	11,000	54	00	120	15	Rocky Mts.
Sir Sandford	11,590	51	39	117	52	Selkirk Mts.
The Helmet	11,160	51	11	116	20	Rocky Mts.
Whitehorn	11,101	53	08	119	16	“
Yukon—[2]						
Alverstone	14,500	60	21	139	02	St.EliasMts.
Augusta	14,070	60	18	140	28	“
Baird	11,375	60	19	140	31	“
Badham	12,625	60	38	139	47	“
Cook	13,760	60	10	139	59	“
Craig	13,250	–	–	–	–	“
Hubbard	14,950	61	16	140	53	“
Jeannette	11,700	60	20	140	43	“
King	17,130	60	35	140	39	“
Logan	19,850	60	35	140	21	“
Lucania	17,150	61	01	140	28	“
Malaspina	12,150	60	19	140	34	“
McArthur	14,400	60	36	140	13	“
Newton	13,811	60	19	140	52	“
St. Elias	18,008	60	18	140	57	“
Steele	16,644	61	06	140	19	“
Strickland	13,818	61	14	140	45	“
Vancouver	15,696	60	21	139	42	“
Walsh	14,498	61	00	140	00	“
Wood	15,885	61	14	140	31	“

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[1] This peak is on the international boundary between British Columbia and Alaska.

[2] The enumerated peaks in Yukon are on or near the Yukon-Alaska boundary.

NOTE.—The highest mountain east of the Rockies, with the exception of the Torngats in Labrador, peaks of which exceed 6,000 feet, is Tableton mountain (recently re-named Mount Jacques Cartier by the Geographic Board of Canada) in N. lat. 48° 59′, W. long. 65° 56′, Gaspé district, Quebec, the summit of which is 4,350 feet above sea-level.

Section 2.—Rivers and Lakes.

General.—The waterways of Canada constitute not only one of its most remarkable geographic features, but one of the most vital elements of its national existence. The fresh-water area of 226,979 square miles is unusually large, constituting over 6 p.c. of the total area of the country. The Great Lakes, with the St. Lawrence river, form the most important system of waterways on the continent and one of the most notable fresh-water transportation routes in the world. Their value in facilitating the cheap and speedy shipment of grain from the Prairie Provinces cannot be overestimated. These lakes never freeze over, but usually most of their harbours are closed by ice about the middle of December and remain frozen over until the end of March or the beginning of April.

Drainage Basins.—The great drainage basins of Canada are the Atlantic (524,900 square miles), the Hudson Bay (1,486,000 square miles), the Pacific (387,300 square miles), the Arctic (1,290,000 square miles) and the Gulf of Mexico (12,365 square miles). Table 3 indicates the drainage areas of the more important rivers.

3.—Drainage Basins of Canada.

NOTE.—Owing to overlapping and to the fact that minor basins are omitted, the totals of each drainage basin do not represent an addition of the drainage areas as given. Tributaries and sub-tributaries are indicated by indentation of the names. The Gulf of Mexico basin is that part of the southern area of the Prairie Provinces drained by the Missouri and Mississippi rivers and their tributaries.

Drainage Basin.	Area Drained.
Atlantic Basin.	sq. miles.
Miramichi	5,400
St. John	21,500
St. Lawrence	309,500
Saguenay	35,900
St. Maurice	16,200
French	8,000
Nipigon	9,000
Ottawa	56,700
du Lièvre	3,500
Gatineau	9,100
Total	**524,900**
Hudson Bay Basin.	
Koksoak	62,400
George	20,000
Big	26,300
Eastmain	25,500
Rupert	15,700
Broadback	9,800
Nottaway	29,800
Moose	42,100
Abitibi	11,300
Missinaibi	10,600
Albany	59,800
Kenogami	20,700
Attawapiskat	18,700
Winisk	24,100
Severn	38,600
Hayes	28,000
Nelson	370,800
Winnipeg	44,000
English	20,600
Red	63,400
Assiniboine	52,600
Saskatchewan	158,800
North Saskatchewan	54,700
South Saskatchewan	65,500
Red Deer	18,300
Bow	11,100
Belly	8,900
Churchill	115,500
Hudson Bay Basin—concluded.	sq. miles.
Kazan	32,700
Dubawnt	58,500
Total	**1,486,000**
Pacific Basin.	
Yukon	145,800
Porcupine	24,600
Stewart	21,900
Pelly	21,300
Lewes	35,100
White	15,000
Alsek	11,200
Taku	7,600
Stikine	20,300
Nass	7,400
Skeena	19,300
Fraser	91,700
Thompson	21,800
Nechako	15,700
Blackwater	5,600
Quesnel	4,500
Chilcotin	7,500
Columbia	39,300
Kootenay	15,500
Okanagan	6,000
Kettle	3,160
Pend d'Oreille	1,190
Total	**387,300**
Arctic Basin.	
Back	47,500
Coppermine	29,100
Mackenzie	682,000
Liard	100,700
Hay	25,700
Peace	117,100
Athabaska	58,909
Total	**1,290,000**
Gulf of Mexico Basin	**12,365**

The St. Lawrence River System.—Most important of the lakes and rivers of Canada is the chain of the Great Lakes with their connecting rivers, the St. Lawrence river and its tributaries. This chain is called the St. Lawrence River system. The Great Lakes, separating the province of Ontario from the United States and connected by a series of canals with the St. Lawrence river, allow vessels to proceed from the Atlantic ocean to the interior of the Dominion as far as Fort William and Port Arthur, twin cities situated on lake Superior, practically half way across the continent. The present waterway provides a draught of 30 feet as far as Montreal, 14 feet through the remainder of the St. Lawrence river and 20 feet on the Great Lakes.

Other River Systems.—Apart from the St. Lawrence, the great waterway of the eastern half of the Dominion, other systems also merit some attention. The Saskatchewan river, for example, flowing eastward from the Rocky mountains to lake Winnipeg and thence northward by the Nelson river into Hudson bay, drains a great part of the plains of the western provinces. In the north, the Mackenzie river, with its tributaries the Slave, Liard, Athabaska and Peace rivers, follows the northerly slope of the Great Plain and empties into the Arctic ocean, its waters having traversed in all a distance of 2,514 miles. The Yukon river, after draining a great part of the Yukon Territory, flows northward through Alaska into the Behring sea after a course of 1,765 miles. The Fraser, Columbia, Skeena and Stikine rivers flow into the Pacific ocean after draining the western slopes of the mountains of British Columbia. Table 4 gives the lengths of the principal rivers with their tributaries, classified according to the course taken by their waters.

4.—Lengths of Principal Rivers and Tributaries in Canada.

Note.—In this table the tributaries and sub-tributaries are indicated by indentation of the names. Thus the Ottawa and other rivers are shown as tributary to the St. Lawrence, and the Gatineau and other rivers as tributary to the Ottawa.

River.	Miles.
Flowing into the Atlantic Ocean.	
Natashkwan (to Labrador boundary)	160
Romaine	270
Moisie	210
Marguerite	130
St. John	399
Miramichi	135
St. Lawrence (to head of St. Louis, Minn.)	1,900
Manikuagan	310
Outarde	270
Bersimis	240
Saguenay (to head of Peribonka)	405
Peribonka	280
Mistassini	185
Ashuapmuchuan	165
Chaudière	120
St. Maurice	325
Mattawin	100
St. Francis	165
Richelieu	210
Ottawa	696
North	70
Rouge	115
North Nation	60
du Lièvre	205
Gatineau	240
Coulonge	135
Dumoine	80
South Nation	90
Mississippi	105
Madawaska	130
Petawawa	95
Moira	60
Trent	150
Grand	165
Thames	163
French (to head of Sturgeon)	180
Sturgeon	110
Spanish	153
Mississagi	140
Thessalon	40
Nipigon (to head of Ombabika)	130
Flowing into Hudson Bay.	
Hayes	300
Nelson (to lake Winnipeg)	400
Nelson (to head of Bow)	1,600
Red (to head of lake Traverse)	355
Red (to head of Sheyenne)	545
Assiniboine	590
Souris	450
Qu'Appelle	270
Winnipeg (to head of Firesteel)	475
English	330
Saskatchewan (to head of Bow)	1,205
North Saskatchewan	760
South Saskatchewan (to head of Bow)	865
Bow	315
Belly	180
Red Deer	385
Churchill	1,000
Beaver	305
Kazan	455
Dubawnt	580
Severn	420
Winisk	295
Flowing into Hudson Bay—concluded.	
Attawapiskat	465
Albany (to head of Cat river)	610
Moose (to head of Mattagami)	340
Mattagami	275
Abitibi	340
Missinaibi	265
Harricanaw	250
Nottaway (to head of Waswanipi)	400
Waswanipi	190
Rupert	380
Eastmain	375
Big	520
Great Whale	365
Leaf	295
Koksoak (to head of Kaniapiskau)	535
Kaniapiskau	445
George	365
Flowing into the Pacific Ocean.	
Columbia (total)	1,150
Columbia (in Canada)	465
Kootenay	400
Fraser	695
Thompson (to head of North Thompson)	270
North Thompson	185
South Thompson	120
Chilcotin	145
Blackwater	140
Nechako	255
Stuart	220
Porcupine	525
Skeena	335
Nass	205
Stikine	335
Alsek	260
Yukon (mouth to head of Nisutlin)	1,765
Yukon (int. boundary to head of Nisutlin)	655
Stewart	320
White	185
Pelly	330
Macmillan	200
Lewes	338
Flowing into the Arctic Ocean.	
Anderson	465
Horton	275
Mackenzie (to head of Finlay)	2,514
Peel	365
Arctic Red	230
Twitya	200
Liard	570
Fort Nelson	260
South Nahanni	250
Petitot	260
Athabaska	765
Pembina	210
Slave	258
Hay	350
Peace (to head of Finlay)	1,054
Finlay	250
Parsnip	145
Smoky	245
Little Smoky	185
Coppermine	525
Back	605

The Great Lakes.—Table **5** shows the length, breadth, area, elevation above sea-level and maximum depth of each of the Great Lakes. Particularly notable are the depth of lake Superior and the shallowness of lake St. Clair and lake Erie.

5.—Areas, Elevations and Depths of the Great Lakes.

Lake.	Length.	Breadth.	Maximum Depth.	Area.	Elevation above Sea-level.
	miles.	miles.	feet.	square miles.	feet.
Superior	383	160	1,180	31,810	602·29
Michigan	320	118	870	22,400	581·13
Huron	247	101	750	23,010	581·13
St. Clair	26	24	23	460	575·62
Erie	241	57	210	9,940	572·52
Ontario	180	53	738	7,540	246·17

Lake Superior, with its area of 31,810 square miles, is the largest body of fresh water in the world. As the International Boundary between Canada and the United States passes through the centre of lakes Superior, Huron, St. Clair, Erie and Ontario, only a part of the areas of these lakes given in the above statement is Canadian, while the whole of lake Michigan is within United States territory. The total length of the St. Lawrence waterway, from the head of the St. Louis river in Minnesota to Pointe-des-Monts at the entrance of the gulf of St. Lawrence, is 1,900 miles. The tributaries of the St. Lawrence, several of which have themselves important tributaries, include the Ottawa river, 696 miles long, the St. Maurice river, 325 miles long, and the Saguenay (to head of Peribonka), 405 miles long.

Other Inland Waters.—In addition to the Great Lakes, there are large bodies of inland water in other parts of Canada. Of these only the following principal lakes, with their respective areas, need be mentioned: in Quebec, lake Mistassini (840 square miles); in Ontario, lake Nipigon (1,590 square miles); in Manitoba, lake Winnipeg (9,398 square miles), lake Winnipegosis (2,086 square miles) and lake Manitoba (1,817 square miles); in Manitoba and Saskatchewan, Reindeer lake (1,765 square miles); in Saskatchewan and Alberta, lake Athabaska (2,762 square miles). All these are within the boundaries of the provinces as at present constituted and are exclusive of lakes situated in the Northwest Territories, the largest of which are Great Bear lake (11,660 square miles) and Great Slave lake (11,170 square miles) in the district of Mackenzie.

Table **6** gives a list of the principal lakes of Canada by provinces, with the area of each in square miles. The table corresponds with the delimitation of the provinces as altered by the Boundary Extension Acts, 1912 (2 Geo. V, cc. 32, 40 and 45).

6.—Areas of Principal Canadian Lakes, by Provinces.

Province and Lake.	Area.
	square miles.
Nova Scotia—	
Bras d'Or	360
New Brunswick—	
Grand	65
Quebec—	
Abitibi (total, 330) part	55
Albanel	145
Apiskigamish	392
Quebec—continued.	
Burnt	56
Champlain (total, 360) part	18
Chibougamau	138
Clearwater	410
Evans	180
Expanse	59
Gull	125
Great Long	110
Indian House	125

6.—Areas of Principal Canadian Lakes, by Provinces—continued.

Province and Lake.	Area.
	square miles.
Quebec—concluded.	
Kakabonga	66
Kaniapiskau	375
Kipawa	95
Lower Seal	130
Manikuagan	110
Manuan	100
Mattagami	88
Minto	485
Mistassini	840
Nichikun	150
Olga	50
Payne	300
Pipmakan	90
Pletipi	138
Quinze, Lac des	55
St. Francis, river St. Lawrence (total, 85) part	63
St. John	375
St. Louis	57
St. Peter	130
Timiskaming (total, 110) part	55
Two Mountains	63
Upper Seal	260
Waswanipi	75
Ontario—	
Abitibi (total, 330) part	295
Dog	61
Eagle	137
Erie (total, 9,940) part	5,094
Huron, including Georgian Bay (total, 23,010) part	13,675
Kesagami	90
La Croix (total, 55) part	25
Long	75
Manitou, Kenora	60
Mille Lacs, Lac des	102
Minnitaki	72
Nipigon	1,590
Nipissing	330
Ontario (total, 7,540) part	3,727
Rainy (total, 366) part	292
Red	69
St. Clair (total, 460) part	270
St. Francis, river St. Lawrence (total, 85) part	20
St. Joseph	187
Sandy	270
Seul	416
Shoal (total, 114) part	108
Simcoe	280
Stout, Berens river	50
Sturgeon, English river	110
Superior (total, 31,810) part	11,200
Timagami	90
Timiskaming (total, 110) part	55
Trout, English river	156
Trout, Severn river	215
Woods, lake of the (total, 1,346) part	1,127
Manitoba—	
Athapapuskow	104
Atikameg	112
Beaverhill	70
Cedar	537
Cormorant	134
Cross (Nelson river)	274
Dauphin	200
Dog	64
Etawney	546
Gods	319
Goose	53
Grenville	207
Island	550
Kipahigan (total, 59) part	29
Manitoba—concluded.	
Kiskittogisu	99
Kiskitto	65
Kississing	141
Manitoba	1,817
Molson	154
Moose	525
Namew (total, 81) part	8
North Indian	150
Nueltin (total, 336) part	76
Oxford	155
Pelican, west of Winnipegosis	80
Playgreen	257
Reed	78
Red Deer, west of lake Winnipegosis	86
Reindeer (total, 1,765) part	245
St. Martin	125
Setting	65
Shoal (total, 114) part	6
Sipiwesk	201
Sisipuk (total, 99) part	73
Southern Indian	1,200
Stevenson	75
Swan	100
Talbot	72
Todatara (total, 241) part	156
Walker	62
Waterhen	90
Wekusko	64
Winnipeg	9,398
Winnipegosis	2,086
Woods, lake of the (total, 1,346) part	59
Saskatchewan—	
Amisk	111
Athabaska (total, 2,762) part	1,700
Besnard	72
Candle	56
Canoe	68
Churchill	213
Cold (total, 136) part	36
Cree	350
Cumberland	93
Doré	248
Île-à-la-Crosse	187
Johnstone	123
Kipahigan (total, 59) part	30
La Plonge	90
Last Mountain	89
Little Quill	70
Loche, Lac la	70
Montreal	162
Namew (total, 81) part	73
Nemeiben	63
Peter Pond	302
Plonge, Lac la	64
Primrose (total, 181) part	173
Quill	236
Reindeer (total, 1,765) part	1,520
Ronge, Lac la	450
Sisipuk (total, 99) part	26
Smoothstone	110
Snake	159
Wollaston	768
Alberta—	
Athabaska (total, 2,762) part	1,062
Beaverhills	80
Biche, Lac la	94
Buffalo	56
Calling	55
Claire	545
Cold (total, 136) part	100
Lesser Slave	461
Mamawi	64
Peerless	75

6.—Areas of Principal Canadian Lakes, by Provinces—concluded.

Province and Lake.	Area.
	square miles.
Alberta—concluded.	
Primrose (total, 181) part	8
Sullivan (variable)	62
Utikuma	85
British Columbia—	
Adams	52
Atlin (total, 246) part	245
Babine	194
Chilko	75
Eutsuk	153
François	91
Harrison	94
Kootenay	168
Kotcho, (unsurveyed and estimated)	90
Lower Arrow	59
Okanagan	136
Quesnel	104
Shuswap	120
Stuart	136
Tagish (total, 114) part	69
Takla	96
Teslin (total, 158) part	62
Upper Arrow	89
Northwest Territories—	
Aberdeen	475
Artillery	207
Aylmer	340
Baker	975
Clinton-Colden	253
Dubawnt	1,600
Northwest Territories—concluded.	
Faber	163
Franklin	175
Garry	980
Gras, Lac de	345
Great Bear	11,660
Great Slave	11,170
Hardisty	107
Hottah	377
Kaminuriak	360
Macdougal	265
Maguse	540
Martre, Lac la	1,335
Mackay	250
Marian	90
Nueltin (total, 336) part	260
Nutarawit	350
Pelly	331
Point	295
Rae	74
Schultz	110
Thoalintoa	160
Todatara (total, 241) part	85
Yathkyed	860
Yukon—	
Aishihik	107
Atlin (total, 246) part	1
Kluane	184
Kusawa	56
Laberge	87
Tagish (total, 114) part	45
Teslin (total, 246) part	123

Section 3.—Islands.

The islands of Canada are among its most remarkable geographic features. They include the numerous unsurveyed and little known areas of the Arctic regions, the fringe of both large and small islands off the Pacific coast, those of the Maritime Provinces and Quebec in the Atlantic ocean and the gulf of St. Lawrence, together with the islands of the Great Lakes and other inland waters. Of the Arctic islands, but little need be said. They are known to be of vast extent, Baffin, Victoria and Ellesmere, the three largest, being approximately 199,610, 80,450 and 78,400 square miles in area respectively, but Banks, Devon, Southampton, Somerset, Prince of Wales, Melville and Axel Heiberg are also of considerable size. Their economic possibilities, beyond scattered deposits of coal and other minerals, have not been established. The Pacific Coast islands, with the exception of Vancouver island and the Queen Charlotte group, are small and dot the western coast of British Columbia from Dixon entrance to the southern boundary of the province. Vancouver island is 285 miles long and from 40 to 80 miles broad, covering an area of about 13,500 square miles; the mountain range which forms its backbone rises again to form the Queen Charlotte islands farther north. These islands figure largely in the mining, lumbering and fishing industries of the West.

On the eastern coast of the Dominion are the island province of Prince Edward Island, the island of Cape Breton (an integral part of Nova Scotia), Anticosti and the Magdalen group (included in the province of Quebec) and the islands of Grand

Manan and Campobello (part of the province of New Brunswick) in the bay of Fundy. Prince Edward island is 2,184 square miles in area, Cape Breton 3,120 and Anticosti of about the same extent. Fishing activities in these eastern islands are important, while agriculture on Prince Edward island and mining on Cape Breton are among the chief occupations of the inhabitants.

Manitoulin island in lake Huron and the Thousand Islands group in the St. Lawrence river, at its outlet from lake Ontario, are the more important islands of the inland waters.

PART II.—GEOLOGY.

Section 1.—Geology of Canada.[1]

The outstanding feature of Canadian geology is the vast area underlain by formations of Precambrian age. These occupy nearly the whole of Canada east of a line joining lake Winnipeg and Great Bear lake with the exception of the Maritime Provinces, the extreme southern parts of Ontario and Quebec, and a part of Ontario adjacent to the southern coast of Hudson bay. The Precambrian rocks are the oldest rocks exposed on the earth's surface, and the vast area which they underlie is one that has probably existed as a land mass throughout longer periods than any other part of Canada.

These ancient formations extend, with gentle sloping surface, in almost all directions beneath a mantling series of nearly flat-lying sedimentary rocks of Palæozoic, Mesozoic and Cenozoic age. These little disturbed sediments occupy southern Quebec, southern Ontario, the Prairie Provinces and the Northwest Territories. Some of them were at one time of much wider extent and covered part or all of the Precambrian area.

Towards the Atlantic and Pacific coasts the Palæozoic and later sediments, together with the older rocks on which they rest and assemblages of volcanic rock, are intensely folded and faulted, forming the Appalachian system of mountains on the east and the great Cordillera, comprising nearly all of British Columbia and Yukon, on the west.

Subsection 1.—Topography.

The present topography of Canada is the temporary outward expression of a half continent which is subject to unceasing change. It is the result of the operation of geological processes at the surface of the earth or at depth throughout hundreds of millions of years. It derives from the injection of igneous rock masses in liquid form beneath the surface, the ejection of lavas and volcanic fragmental material, the deposition of sediments, the folding and faulting of rock formations, and the disintegration of solid rocks and transportation of the products of disintegration by surface agencies. The slow rising and sinking of broad continental land masses and the upheaval and subsequent gradual levelling of mountain ranges are involved.

The great area in Eastern Canada underlain by rocks of Precambrian age is known as the Canadian (or Precambrian) Shield or the Laurentian Plateau. It may be regarded as a subdued plateau or perhaps, more strictly speaking, a peneplanated surface that has been rejuvenated by Pleistocene glaciation and uplift.

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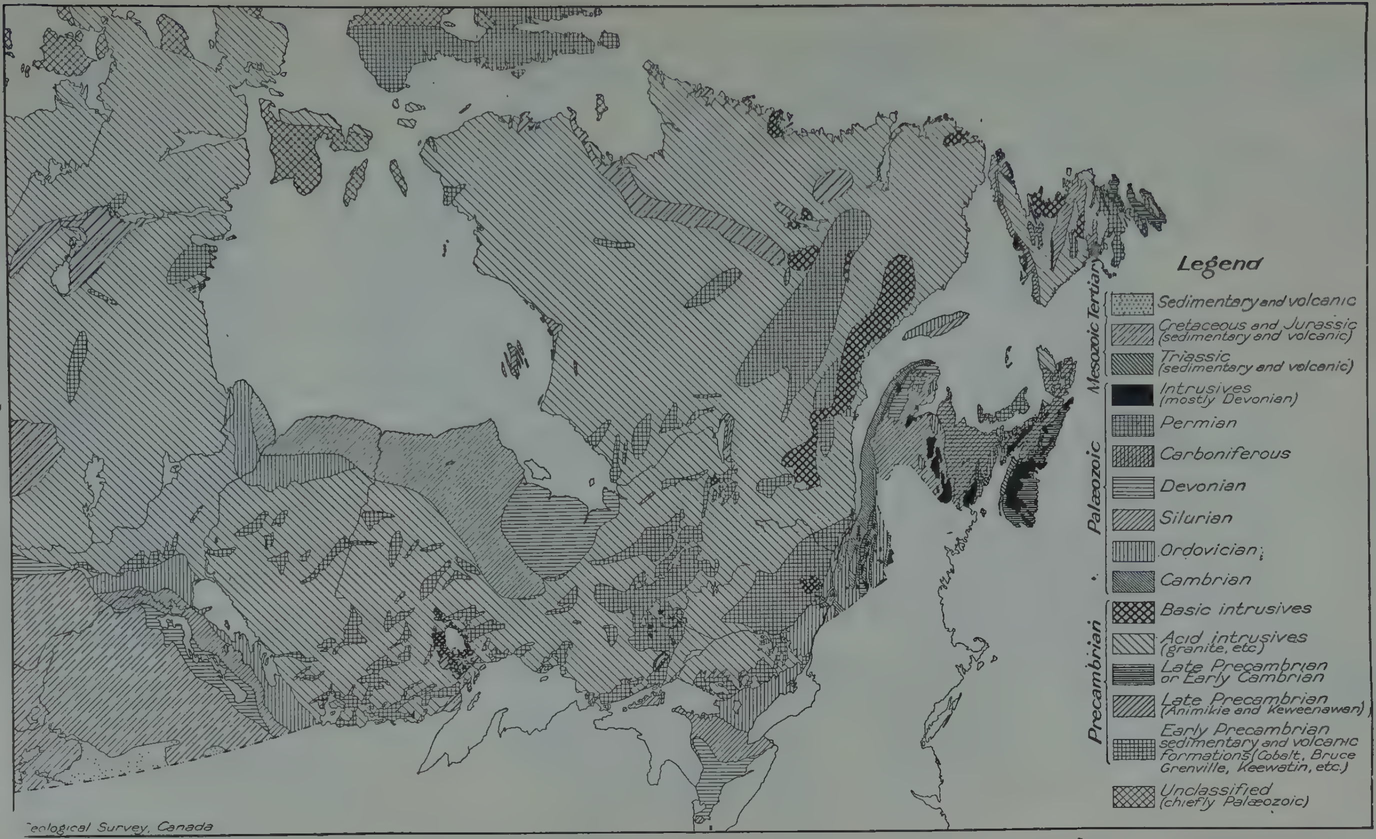
[1] By Wyatt Malcolm, M.A., Geological Survey, Ottawa.


Legend
Mesozoic Tertiary
Sedimentary and volcanic
Cretaceous and Jurassic (sedimentary and volcanic)
Triassic (sedimentary and volcanic)
Palæozoic
Intrusives (mostly Devonian)
Permian
Carboniferous
Devonian
Silurian
Ordovician
Cambrian
Precambrian
Basic intrusives
Acid intrusives (granite, etc)
Late Precambrian or Early Cambrian
Late Precambrian (Animikie and Keweenawan)
Early Precambrian sedimentary and volcanic formations (Cobalt, Bruce Grenville, Keewatin, etc.)
Unclassified (chiefly Palæozoic)
eological Survey, Canada

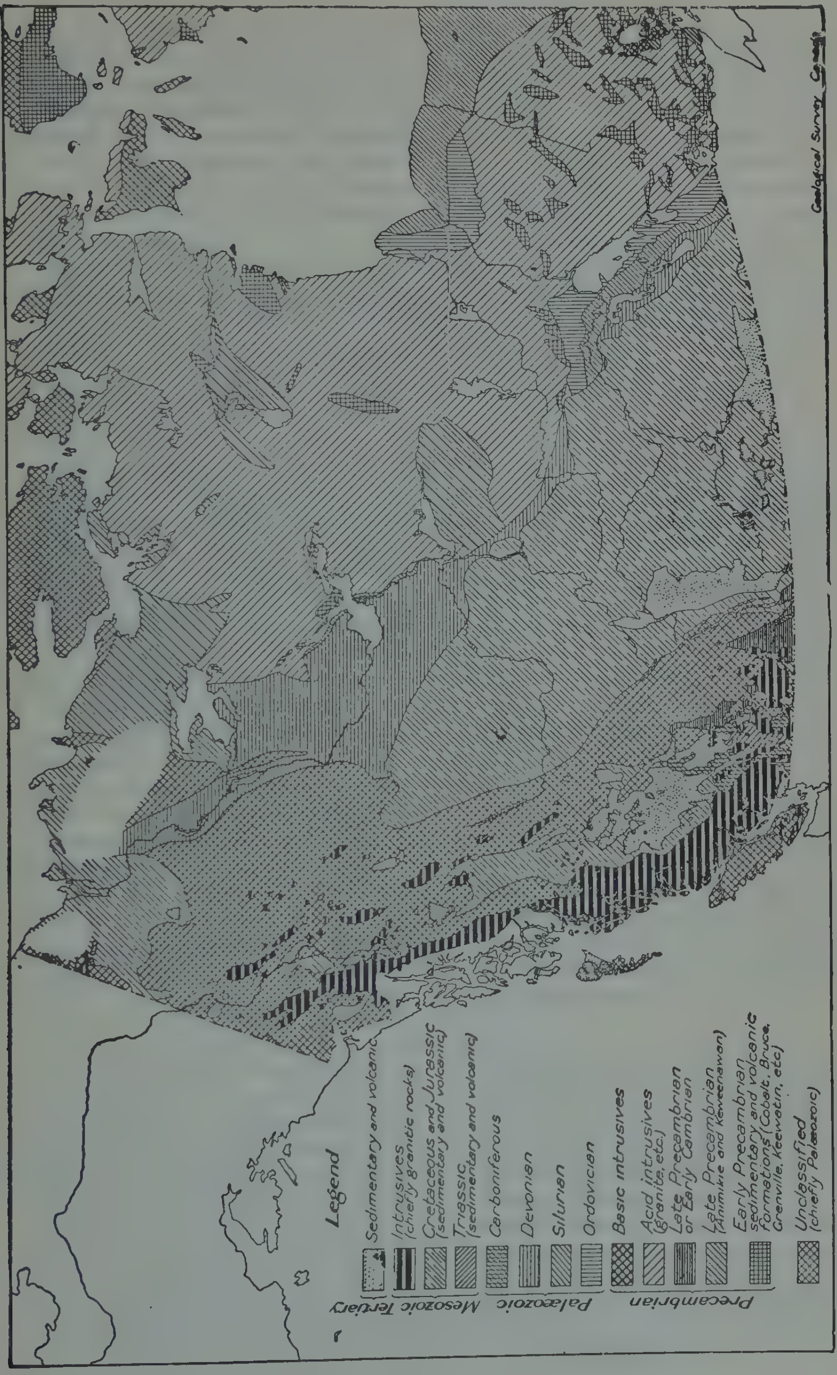
GEOLOGY OF EASTERN CANADA AND NEWFOUNDLAND.

Its average elevation probably does not exceed 1,500 feet, and, except in the northeast, there are few areas that exceed 2,000 feet. In general, the surface slopes gently to the surrounding plain and there are long stretches of the boundary in which there is no marked difference of elevation between the Precambrian Shield and the adjacent Palæozoic plain; there are other long stretches in which there is an abrupt rise of several hundred feet above the plain or the sea. The greatest known elevations are in the eastern part of Baffin island and along the coast of northern Labrador. A peak of the Torngat mountains of Labrador is estimated to have an elevation of 7,000 feet. The coast is one of the boldest and most rugged of the world, with nearly vertical cliffs rising 1,000 to 2,000 feet in height. Though the Canadian Shield is an area of low relief and has a remarkably even sky line, the surface is generally rugged with successions of rocky hills 100 to 200 feet high. Occasional exceptions occur in which there is a relief of several hundred feet, as in the hills on the north shores of lake Huron and lake Superior. The area is dotted with lakes, large and small, of irregular outline and with numerous islands. They are rock basins that spill their waters from one to another by streams with rapids and falls. In an area of 250 square miles in western Ontario that cannot be considered exceptional, aerial surveys have shown that there are 700 lakes. There are well-defined deep trenches like that occupied by lake Timiskaming, related to faulting or other structural features. The Saguenay river flows in a trench that descends to more than 800 feet below sea-level, and lake Superior, the largest body of fresh water on the face of the earth, fills a basin in the Canadian Shield that reaches about 400 feet below sea-level.

Extending south and west from the Canadian Shield and limited on the east by the Appalachian Mountain system and on the west by the western Cordillera of America, is the great North American plain. The northeastern part of this plain occupies southern Ontario south of a line extending from Georgian bay to the east end of lake Ontario, that part of eastern Ontario lying between the Ottawa and St. Lawrence rivers, and the part of Quebec lying-adjacent to the St. Lawrence between Montreal and Quebec. The part of the plain west of the Canadian Shield is of wide extent, and stretches northward to the Arctic ocean between a line approximately joining lake Winnipeg, lake Athabaska, Great Slave lake and Great Bear lake on the east, and the foothills of the Rocky mountains on the west.

Although these areas are but parts of one great plain and are disconnected in Canada only because the Canadian Shield happens to project across the International Boundary in a narrow belt east of lake Ontario and in a wide zone between lake Huron and the lake of the Woods, they will, for convenience of treatment, be considered separately. Those parts lying in the basin of the St. Lawrence and the Great Lakes have been designated the St. Lawrence Lowlands, while the western area has been named the Interior Plains.

The part of the St. Lawrence Lowlands lying in the eastern angle of Ontario and in Quebec south of Montreal, and extending down the St. Lawrence, is comparatively flat and lies less than 500 feet above sea-level. On the lower St. Lawrence it is greatly narrowed by the near approach of the Appalachian system to the Canadian Shield. The part lying adjacent to lakes Ontario, Erie and Huron is of less even surface, has its greatest elevation of over 1,700 feet south of Georgian bay, and slopes rather gently to the Great Lakes. A striking topographical feature is the Niagara escarpment. This is an eastward-facing escarpment having a height of 250 to 300 feet and extending from the Niagara peninsula northwest to Bruce peninsula.


Legend
Tertiary
Sedimentary and volcanic
Mesozoic
Intrusives (chiefly granitic rocks)
Cretaceous and Jurassic (sedimentary and volcanic)
Triassic (sedimentary and volcanic)
Palæozoic
Carboniferous
Devonian
Silurian
Ordovician
Precambrian
Basic intrusives
Acid intrusives (granite, etc.)
Late Precambrian or Early Cambrian
Late Precambrian (Animikie and Keweenawan)
Early Precambrian sedimentary and volcanic formations (Cobalt, Bruce, Grenville, Keewatin, etc)
Unclassified (chiefly Palæozoic)
Geological Survey Canada

GEOLOGY OF WESTERN CANADA

The Interior Plains region is in general a rolling country with broad undulations and a slope eastward and northward of a few feet per mile, descending from an elevation of 3,000 to 5,000 feet near the mountains on the west to less than 1,000 feet at its eastern border. The elevation of the Canadian Pacific Railway at Calgary is 3,439 feet and at Winnipeg 772 feet. The rolling character of the area is relieved by several flat-topped hills—erosion remnants rising hundreds of feet above the surrounding country—by flat areas that formed the beds of lakes of considerable extent, and by deeply incised river valleys. A striking feature is the broken escarpment of western Manitoba and eastern Saskatchewan, marking the rise of 400 to 1,000 feet from the Manitoba lowland to the upland of the west. A lowland of considerable extent stretches for some distance into Ontario and Manitoba from the south shore of Hudson bay.

The Arctic archipelago consists of large islands, many of which rise prominently from the sea as sloping table lands while others are comparatively low.

The Appalachian and Acadian regions occupy practically all that part of Canada lying east of the St. Lawrence, with the exception of the lowland west of a line joining Quebec city and lake Champlain. The Appalachian region is a continuation northward into the province of Quebec of three chains of the Appalachian system of mountains. The most westerly of these ranges stretches northeast into Gaspé peninsula, where it forms flat-topped hills over 3,000 feet high. Mount Jacques Cartier on Tabletop mountain has an elevation of 4,350 feet. The Acadian region, which includes New Brunswick, Nova Scotia, and Prince Edward Island, is an alternation of uplands and lowlands. The northwest part of New Brunswick is an upland with hills and ridges rising to 2,500 feet or higher. Adjacent to the bay of Fundy is a series of ridges rising in places to an elevation of 1,200 feet or more. Between these two New Brunswick uplands is a lowland forming the whole eastern part of the province and converging towards the southwest. This lowland extends east so as to include Prince Edward island, the western fringe of Cape Breton island and the mainland of Nova Scotia north of the Cobequid mountains, which have an elevation of 800 to 1,000 feet. South of them lies a long narrow lowland stretching from Chedabucto bay to Minas basin and along the Cornwallis-Annapolis valley between North and South mountains. South of this is a highland sloping to the Atlantic coast and having an elevation at its highest part of about 700 feet. The northern part of Cape Breton island is a tableland 1,200 feet high, with its central part rising to an elevation considerably in excess of this, one point at the headwaters of Clyburn and Cheticamp rivers being 1,747 feet above sea-level.

The Cordilleran region, the mountainous area bordering the Pacific, extends northward from the United States through Canada into Alaska, and embraces nearly all of British Columbia and the Yukon, and the western edge of Alberta and the Northwest Territories. The eastern part of the Cordillera is occupied by the Rocky mountains. They consist of overlapping chains with peaks rising to heights of 10,000 to 12,000 feet. They extend northwest and fall away towards the Liard river. North of this river the mountains with a similar trend lie 100 miles farther east and are known as the Mackenzie mountains. The western part of the Cordillera is occupied by the Coast range and the mountains of Vancouver and Queen Charlotte islands. The Coast range rises to heights of 7,000 to 9,000 feet. Between the Rocky mountains and the Coast range lies a vast plateau system having elevations of 3,000 to 4,000 feet, and cut by deep river valleys. The plateau region merges into rugged mountain ranges as it approaches the Rocky mountains; it also breaks into mountains in northern British Columbia, but becomes subdued to a plateau again in the Yukon. A striking feature of the Cordillera is the deep trench that lies immediately to the west of the Rocky mountains, extends northwesterly from the International Boundary into Yukon and is occupied by the head waters of the Kootenay, Columbia and Fraser rivers, and tributaries of the Peace and Liard rivers.

Subsection 2.—Geology.

Canadian Shield.—The Canadian Shield is underlain by rocks of Precambrian age. These consist of series of sedimentary and volcanic formations and igneous intrusives of great variety. They were subjected to mountain-building processes, folded, crushed and metamorphosed, and the mountains were reduced nearly to their present level before the earliest Palæozoic sediments were deposited. The Precambrian period was probably of greater duration than all the subsequent geological periods taken together.

Geologists do not agree on the main subdivisions of the Precambrian formations. There is one great unconformity, which represents a long period of erosion, and which divides the stratified rocks into two groups, the earlier group consisting of a great mass of volcanics with associated sedimentary rocks and the later group consisting more fully of sediments. The earlier group is greatly folded and altered; the later group has in general been less disturbed and altered.

In the earlier group the most important series is the Keewatin. The Keewatin consists essentially of lava flows accompanied in many places by tuffs and basic intrusives, and includes iron formation, which frequently is made up of thin layers of chert-like quartz, alternating with quartzose layers holding magnetite or hæmatite or both. Sedimentary rocks consisting of conglomeratic, sandy and slaty strata are frequently associated with the volcanics and are, in places, of considerable thickness and extent. They may underlie the volcanics, like the Couchiching of the Rainy Lake area; they may be interbedded with the volcanics, like the Doré formation of Michipicoten; or they may overlie the volcanics, like the Timiskaming formation of northeastern Ontario and western Quebec. Between the volcanics and overlying sediments of northeastern Ontario and western Quebec there is an unconformity that is regarded by some geologists as of major importance. The early Precambrian formations occupy numerous areas of various sizes up to several hundred square miles in western Quebec, northern Ontario, eastern and central Manitoba, and to a less degree in Saskatchewan and the Northwest Territories.

The later Precambrian formations consist in a large measure of sedimentary rocks—conglomerates, quartzites and slates. In an area lying immediately north of lake Huron and stretching northeast to beyond lake Timiskaming lies a succession of sediments known as the Huronian. These consist of : (a) the Bruce series, made up of conglomerates, quartzites and impure dolomitic limestone with an aggregate thickness of 2,700 to 12,000 feet; and (b) the Cobalt series, made up of boulder conglomerate and other materials probably of glacial origin, overlain by quartzite and calcareous quartzite, with an aggregate thickness of 12,000 feet. An erosion interval of considerable time intervened between these two series. These strata are undulating with gentle dips except on the north shore of lake Huron and eastward, where they stand at high angles and represent the core of an ancient mountain range that probably flanked the southern edge of the continent.

North of lake Superior the later Precambrian rocks are represented by a group of nearly flat-lying sediments known as the Kaministikwan group. This group embraces the Animikie series of conglomerate, iron formation, and shale; the Sibley series of conglomerate, sandstone, limestone,and tuff; and the Osler series of lavas, conglomerate, sandstone and tuff.

In northwestern Manitoba the Precambrian formations are separated by an unconformity into an earlier Wekuskoan group of lavas and sediments and a later group of Missian sediments.

Strata, presumably of late Precambrian age, are known to occur on lake Athabaska, Great Slave lake, east of Great Bear lake, on Belcher islands, on the east of Hudson bay and at other points in the Ungava peninsula. In the southern part of Ungava peninsula sediments are found that bear a resemblance to the Grenville-Hastings group of southern Quebec and southeastern Ontario.

The Grenville-Hastings group consists of closely folded, highly altered sediments intruded by, and in places interleaved with, granite. They are in general rusty-weathering banded gneisses, quartzose gneisses grading into quartzites, crystalline limestones, amphibolites, pyroxene-rich rocks and volcanic schists. Pegmatite dykes are common and anorthosite occupies large areas. The Grenville-Hastings group forms a belt in the southern part of the Canadian Shield, extending east from Georgian bay. The formations have not as yet been indubitably correlated with the Keewatin and Huronian rocks to the north.

The Precambrian sediments have suffered intrusion at various times by granites. These have been unroofed at different stages in the history of the Precambrian, and pebbles of granite are found in the conglomerates as early as those of Keewatin age. So complete has been the unroofing of the granites that they are exposed over the greater portion of the Canadian Shield. Basic intrusives were common in later Precambrian times. Sills and dykes of diabase cut the late Precambrian sediments around lake Nipigon, to the west of lake Timiskaming and at many other points. A thick laccolith of norite and micropegmatite is found in the Sudbury district.

The Canadian Shield was intensely glaciated during Pleistocene times, with the exception of the more elevated parts of the northern Labrador coast, and in general only a scant amount of soil was left, sufficient partially to conceal the rocks and maintain a forest growth. In some areas, as in part of northern Ontario and Quebec, adjacent to the Canadian National Railway, stratified fine sediments were deposited in lakes formed in front of the retreating glacier.

The Precambrian formations are prolific of mineral deposits of great number, variety and extent. These latter occur generally at or near the contact of the intrusives and the intruded rocks. Among them are the gold deposits of Porcupine and Kirkland Lake, associated with intrusions of porphyry, the silver deposits of Cobalt, South Lorrain and Gowganda, associated with diabase sills, the enormous nickel-copper deposits of Sudbury, associated with norite of a thick laccolithic intrusion, the auriferous copper sulphides of western Quebec, the copper-zinc sulphides of Manitoba, and the iron ores and iron pyrites of many localities of Ontario; in the Grenville-Hastings area are found deposits of galena, mica, graphite, feldspar, magnesite, fluorite, kaolin, molybdenite, talc and apatite.

St. Lawrence Lowlands.—The St. Lawrence Lowlands are divided into two parts by an arm of the Laurentian Plateau that extends southward into New York State, crossing the St. Lawrence between Kingston and Brockville. They are underlain by nearly horizontal Palæozoic sediments dipping gently away from the Canadian Shield and resting on the sloping surface of Precambrian rocks which, prior to the deposition of the Palæozoic strata, had been reduced to a physiographic condition similar to that existing on the Canadian Shield to-day.

The sediments are almost wholly of marine origin, consist mainly of limestone, magnesian limestone and shale, and range in age from late Cambrian to late Devonian.

In the Ottawa-Montreal division the latest strata are Ordovician; these, together with the Potsdam sandstone (Cambrian), have a thickness of about 6,000 feet. In the Great Lakes region of southern Ontario the Ordovician formations are succeeded upward by those of Silurian age and these in turn by strata of Devonian age. The Ordovician formations form a zone extending from Kingston to the Niagara escarpment and stretching northwest to Georgian bay and into Manitoulin island. The Silurian formations are exposed in the Niagara escarpment and westward in a belt 25 to 50 miles wide stretching northwest from Niagara peninsula into Manitoulin island. West of this nearly the whole of the area between lake Erie and lake Huron is underlain by Devonian limestones and shales. Each in turn is exposed over an area farther to the southwest than the older and underlying formation, so that in travelling westward from Kingston to Sarnia one passes over the bevelled edges of successively younger strata. Borings made at Courtright, in the township of Moore, show a thickness of nearly 4,260 feet of sedimentary rocks.

It is probable that the seas in which some of these sedimentary rocks were formed extended northward over the Precambrian rocks through Hudson bay into the Arctic ocean. The presence of outliers on lake St. John, lake Nipissing, and lake Timiskaming in the south, and on lake Nicholson west of Hudson bay, of broad areas of Ordovician, Silurian and Devonian formations south of Hudson bay, and of Cambrian, Ordovician, Silurian and Devonian formations on the islands of the northern part of Hudson bay and of the Arctic seas, is clearly indicative of wide submergence. On the Arctic islands formations of Carboniferous (with coal seams) and Triassic ages are widespread, and there are patches of Tertiary sediments (with lignite). There is also evidence of the occurrence of rocks of Mesozoic age in Moose River basin.

The St. Lawrence Lowlands were covered by the glaciers of Pleistocene time, and the bedrock is to a great extent concealed by thick deposits of glacial till. In places are found stratified deposits that formed in lakes at the edge of the retreating ice sheet. Marine deposits were laid down in an arm of the sea that extended up the St. Lawrence and Ottawa valleys to a point above Ottawa.

The only intrusives worthy of mention are the igneous rocks of alkali types that form the Monteregian hills in southern Quebec, Mount Royal and seven others to the east. They are circular or oval hills that rise 600 to 1,200 feet above the plain and appear to be stock-like bodies or conduits that may have led to volcanic vents or larger masses of intrusives.

The mineral deposits are such as are usually found in the less altered sedimentary rocks. Petroleum has been produced in southern Ontario for 70 years; natural gas has been produced for 40 years in the counties bordering on lake Erie; salt has been obtained for a great many years from thick beds lying at a depth of about 1,000 feet in the counties bordering on lake Huron and lake St. Clair; gypsum is produced in the Grand River valley; limestone and dolomite, utilized in chemical and metallurgical industries, are widespread; materials for construction, for brick, tile and cement manufacture are abundant.

Appalachian and Acadian Regions.—The Appalachian and Acadian regions are composed of geological formations ranging from Precambrian through Palæozoic to Mesozoic. The Palæozoic sediments pass upward from dominantly marine formations into dominantly continental formations. A complete succession is not found and there are several breaks in sedimentation.

Sediments, probably of Precambrian age, occur in southeastern Quebec, southern New Brunswick, northern Cape Breton island and on the Atlantic coast of the mainland of Nova Scotia. The thick series of slates and quartzites, known as the Gold-bearing series, forms a belt occupying a very considerable part of the mainland of Nova Scotia, faces the Atlantic coast and is probably of late Precambrian age.

During the Palæozoic period numerous disturbances took place in sedimentation; there were periods of uplift, of folding, and of erosion. Cambrian formations are found in southeastern Quebec, Ordovician formations are of extensive development in the Appalachian region from Vermont to Gaspé, Silurian and Devonian are well developed in Gaspé and the northwestern part of New Brunswick. Patches of Cambrian, Ordovician, Silurian and Devonian rocks are found in other parts of the Appalachian and Acadian regions.

The system of sediments most widely distributed in the Maritime Provinces is the Carboniferous. The formations are mainly of continental deposition although during Mississippian time a part of the area was submerged and received marine sediments. Towards the close of Devonian time there was a period of intense mountain building and igneous activity. Granite masses of large size were intruded in Nova Scotia and New Brunswick and of smaller size in Gaspé and southeastern Quebec. The upheaval was succeeded by intense erosion, and in early Carboniferous time granite masses were exposed by the removal of the overlying rocks.

The Carboniferous system occupies the triangular lowland forming much of the southeastern half of New Brunswick, the part of Nova Scotia north of Cobequid mountains, part of the lowland to the south of these mountains, southwestern and northeastern Cape Breton island and Prince Edward island. On Prince Edward island the Carboniferous may pass upward into the Permian. In the Carboniferous system are found the coal measures of Sydney and Glace bay, of Inverness, Pictou and Cumberland counties, Nova Scotia; and of the Minto coal field, New Brunswick. The extensive gypsum deposits and the salt beds of Nova Scotia and New Brunswick are found in a formation of Mississippian age, and the bituminous shales of New Brunswick and Nova Scotia are also of early Carboniferous age. The Carboniferous system has in places been subjected to folding and faulting, but considerable areas have suffered little disturbance since these sediments were laid down.

Sandstone and lava flows of Triassic age are exposed on the bay of Fundy, particulary on the south coast. North Mountain is composed of basic lava flows capping Triassic sandstone. During the Pleistocene period the whole of the Appalachian and Acadian regions. with the exception of the higher parts of Gaspé, was subjected to glaciation.

The most important economic minerals of the Appalachian and Acadian regions are coal, asbestos, and gypsum. Reference has already been made to the occurrence of coal and gypsum. Asbestos occurs in altered peridotite in southeastern Quebec. These are the most productive deposits of the world. Chromite also occurs in the peridotite. Auriferous quartz veins, mainly of the interbedded type, are found on domes and pitching anticlines of the gold-bearing series of Nova Scotia. Zinc-lead deposits occur in the Devonian shales and limestones of Gaspé peninsula, zinc-lead-copper sulphides in the southern part of Cape Breton island in a series of lava flows, and copper deposits in southern Quebec.

Interior Plains.—The Interior Plains are underlain by a series of nearly horizontal sedimentary rocks of Palæozoic, Mesozoic and Tertiary ages. The Palæozoic rocks, consisting mainly of limestone, dolomite and shale of Ordovician, Silurian and Devonian ages, form a belt extending north through Manitoba and northwest through Saskatchewan and northeastern Alberta down the basin of the Mackenzie river. East of the Mackenzie, rocks of Cambrian age are exposed in an area of limited extent. The Palæozoic formations rest upon the gently-sloping shelf of the Canadian Shield and pass westward with a dip of a few feet a mile beneath the shales and sandstones of Cretaceous age. The Cretaceous formations occupy nearly the whole of the plain from western Manitoba to the Rocky mountains and extend northward nearly to the Mackenzie river. There are also large parts of the Mackenzie basin, particularly of the lower half, in which the Devonian limestones are overlain by Cretaceous sediments. The Cretaceous sediments vary from shales predominantly of marine origin in the east to sandstones predominantly of continental origin in the west. Between the two are alternations of shales of marine origin with sandstones of brackish-water or fresh-water origin.

The Cretaceous beds are overlain in places by sediments of Tertiary age. The most extensive Tertiary formations are found in the hills of southern Saskatchewan and in a belt running north through central Alberta, where they lie in a broad syncline. Glacial till is widespread and clays were deposited in large lakes formed on the retreat of the ice-sheet. A large part of southern Manitoba formed the bed of glacial lake Agassiz.

The Interior Plains region is the great wheat-producing area of Canada. The mining of coal is one of the important industries; bituminous coal and lignite are produced in large quantities in Alberta and lignite in smaller quantities in Saskatchewan. The Cretaceous sediments are the reservoirs of great quantities of natural gas, and these and underlying formations are the source of the oil of the Turner Valley and other oil fields of Alberta. Oil has also been struck in the Devonian rocks north of Norman on the Mackenzie river. Gypsum is obtained from the Palæozoic rocks of Manitoba and also occurs in northern Alberta.

Western Cordillera.—In the western Cordillera is a very thick complete succession of sediments of Precambian, Palæozoic, Mesozoic and Tertiary ages.

The Rocky mountains consist of a series of great fault blocks in which an enormous thickness of Palæozoic and Mesozoic sediments is exposed. Many thrusts of great extent have resulted in an over-riding of the Mesozoic sediments by the Palæozoic, and the erosion of the softer strata of the former has produced longitudinal valleys between the harder Palæozoic blocks. The Palæozoic formations consist mainly of limestones with less amounts of sandstone and shale. A succession with few breaks from the Cambrian through the Ordovician, Silurian, Devonian and Carboniferous is found, and probably extends with certain deviations throughout the length of the Rocky mountains and Mackenzie mountains. Between the Cambrian and Precambrian beds there is apparently little angular unconformity, but the variation horizontally in the Precambrian strata, on which the Cambrian formations rest, and a similar variation in the ages of the over-lying Cambrian strata furnish evidence of a long period of erosion. The Mesozoic strata consist of soft shales and sandstones some of which are coal-bearing. Strata of Triassic, Jurassic, and Cretaceous ages are represented.

The mountains to the west of the Rocky Mountain trench in southern British Columbia are composed of a series of late Precambrian quartzites, slates and magnesian limestones of great thickness. There are wide areas in the vicinity of granitic intrusives in which intensive alteration of these sediments has taken place. The Precambrian rocks extend west as far as Upper Arrow and Shuswap lakes and north from the International Boundary probably half the length of the province. Quartzites, mica schists and crystalline limestones with interbands and broad areas of schists of various kinds, and intrusive granite gneiss are found over a wide stretch of the Yukon plateau and are probably of Precambrian age. Slates, quartzites and conglomerates, also probably of the same age, occur along the northern part of the Alaska-Yukon boundary, in the Ogilvie range and in the Kluane district.

On the interior plateau of British Columbia, limestones, quartzites and argillites of Carboniferous age and known as the Cache Creek group are of wide distribution. These are succeeded upward by argillites and limestones and a great mass of volcanic intrusives and effusives of Triassic age, and these are succeeded by sediments and volcanics of Jurassic age. The Triassic and Jurassic formations are widely distributed, are found on the islands to the west, and some at least extend into the Yukon.

Formations of Cretaceous age are found on Vancouver and Queen Charlotte islands and in a belt extending up the Fraser and along the eastern edge of the Coast range into the Skeena valley. They are mainly formations of continental origin and carry coal seams, but also include sediments of marine origin and volcanics.

Very early Tertiary times were characterized by widespread orogenic disturbances in the Cordillera. The Rocky mountains were formed and there was much folding and faulting in places in the interior, followed by intense erosion. Tertiary sediments, partly of continental deposition with seams of lignite and partly of marine deposition, occur at many points throughout the interior of the Cordillera and on Vancouver island. Lava flows capping some of these sediments cover broad stretches of the interior plateau.

In Pleistocene time, nearly the whole of the Cordillera with the exception of a large area in the Yukon was subjected to glaciation, and glaciation still persists in the mountainous regions. Volcanics of recent age are found in areas of limited extent.

An episode of great economic importance in the geological history of the West was the intrusion of the granitic rocks of the Coast Range batholith and of acid rocks at different points in the interior, particularly in the southern part of British Columbia in Mesozoic times. Many of the more important mineral deposits of British Columbia, such as the copper deposits of Hidden Creek, Britannia and Allenby mountain, the gold-silver deposits of Salmon River district and the silver-lead deposits of the Slocan, had their origin in solutions given off by the magmas of these acid intrusives.

The lead-zinc deposit of the Sullivan mine lies in sedimentary rocks of Precambrian age. The Cretaceous and Tertiary formations carry seams of coal and lignite of great importance. There are economic deposits of other minerals in great variety throughout the Cordillera, and British Columbia is one of the leading mineral-producing provinces of Canada. The gold of the once famous Klondike region was found in placers of an unglaciated area and the gold of the Cariboo district occurs mainly in Tertiary placers that were unaffected or little affected by glaciation.

Section 2.—Economic Geology of Canada, 1931.*

The purpose of this paper is to call attention to the most important reports and articles treating of the economic geology of Canada and published during 1931. The particular articles referred to, although recently published, do not necessarily contain the best and most complete information on the subjects treated. For further information it is advisable to consult the Dominion and Provincial Departments of Mines. The reference numbers appearing through the text indicate the publishers as listed at the end of this paper.

Antimony.—A description is given by W. J. Wright of the Lake George antimony deposits of York county, New Brunswick.[5] Palæozoic interbedded shales and quartzites are intruded by granite and basic dykes. Quartz veins, carrying stibnite and minor amounts of pyrite, arsenopyrite, and dolomite, cut both the sediments and dykes.

Chromite.—A report is made by A. R. Graham upon the Obonga Lake chromite area, Thunder Bay district, Ontario.[4 5] Precambrian volcanic and sedimentary schists, serpentine, talc-carbonate schist, granite and associated rocks, and diabase sills and dykes occupy the area. The chromite occurs in the serpentine as disseminated grains and as segregated deposits in form of irregular and vein-like bodies. All chromite observed is below commercial grade at the present time.

Clay.—Howells Frechette and J. F. MacMahon describe the clay and shale deposits of Prince Edward Island.[2] The prevailing rocks of the province are soft red sandstones and arenaceous shale probably of Permian or upper Carboniferous age. The sandstones generally contain a considerable percentage of clay matter and in some horizons may be regarded as sandy shales which are gritty. All shales, even those containing sandy matter, develop good plasticity. Marine clay, boulder clay, and clay resulting from the weathering of shales do not offer such good promise as do some of the shales.

Coal.—The stratigraphy and structure of the Corbin coal field, British Columbia,[5] is described by B. R. MacKay. This field, of Cretaceous age, is one of the smallest and at the same time one of the principal producing bituminous coal areas in south-eastern British Columbia. It is unique on account of the great thickness of one of its coal seams and the remarkable concentration of coal in a small area that has occurred through intense folding and faulting of the measures. The coal is of bituminous rank and with a low sulphur content.

The results of further investigations of the Onakawana lignite deposit, Moose River basin, Ontario,[3] is published by W. S. Dyer. Numerous drill holes indicate a series of nearly flat-lying seams with a total thickness varying from 10 to 64 feet. Analysis of the lignite together with logs of bore holes are incorporated.

Copper.—Forrest A. Kerr presents a paper outlining the mineralization of northern British Columbia.[5] Highly altered Palæozoic sediments capped by a thick series of Permo-Carboniferous limestone and Mesozoic volcanics are intruded by the coast range multiple batholith. Upper Cretaceous sediments in considerable thickness, and masses of Tertiary and recent lava flows, occur locally. The earlier "grey granite" is known to have extensive associated mineralization and the "brown granite" is believed to have little. Mineralization is found in the granite, in "roof pendants" in the granite, and in the sediments and volcanics adjacent to the contact.

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*Contributed by P. J. Moran, B. Sc., Geological Survey, Ottawa.

Prospecting attention is lately focused upon the Great Bear Lake and Coppermine River areas, Northwest Territories, where interesting finds of silver, pitchblende and copper have been made. J. P. Norrie,[5] Gordon G. Duncan [5 4] and G. Gilbert[7] submit reports upon these areas. Granite, sandstone containing thin layers of carbonaceous shale, dolomitic limestone, basalt interbedded with sandstone shale, and limestone exist in the Coppermine River area. Disseminated native copper is found in the basalt, amydaloidal copper occurs in the tops of some of the flows along joint cracks and slips, sheets of native copper are common, high grade chalcocite and bornite occur in fissure veins and replacement deposits and chalcopyrite is found in cracks and disseminations in minor amounts. (See radium).

John Drybrough describes a nickel-copper deposit on the north shore of Rankin inlet, Hudson bay.[5 6] Precambrian volcanics, sediments, and intrusive granite and associated rocks occupy the area. The deposit is associated with a sill of pyroxenite, intrusive between the sediments and upper volcanics, which can be traced for three quarters of a mile. Mineralization consists of pyrrhotite and traces of pyrite. The nickel probably exists as pentlandite finely divided in the pyrrhotite.

An article upon prospecting in northwestern Manitoba[5] is written by J. F. Wright. The bed rocks of the area consist of Precambrian volcanics, sediments, sedimentary gneisses, granite gneiss, and intrusive granite and allied rocks. The known mineral deposits of importance are in the lavas, sedimentary gneisses, bodies of quartz gabbro, and granodiorite phases of the granite intrusives. The main type of deposits is sulphide replacement bodies containing copper and zinc. Gold-bearing quartz veins are also found. No reason is known why the mineralization at some localities will not continue in depth below the levels explored at present.

Robert S. Moehlman presents a paper upon the geology of the Opemiska district, Quebec, in the *Pan American Geologist.* The rocks of the region are Precambrian. Between two large masses of granite on the north and south, lies a thick body of volcanic flows with some interbedded sediments extending east and west. These flows and sediments are intruded by numerous basic dykes, sills, and stocks, and by a few acid dykes. Mineralization consists of chalcopyrite, magnetite, pyrite, pyrrhotite, and in places quartz.

Rodgers Peale describes the geology of the Waite-Ackerman-Montgomery ore deposit, in the townships of Duprat and Dufresnoy, Quebec.[5] Precambrian volcanics are intruded by Keeweenawan diabases and quartz porphyry. Mineralization consisting of pyrite, pyrrhotite, sphalerite, and chalcopyrite occurs as replacement deposits in crushed zones in andesite.

During the past nine years, various members of the Geological Survey of Canada have made geological studies of portions of that area in Quebec extending from the Ontario-Quebec provincial boundary line east to Bell river and south of the National Transcontinental railway to latitude 48 degrees. The results of these investigations are incorporated in a report entitled "Geology and ore deposits of Rouyn-Harricanaw region, Quebec",[1] by H. C. Cooke, W. F. James and J. B. Mawdsley. Keewatin volcanics, pre-Huronian sediments and intrusives, Huronian sediments and later diabase dykes form the bed rocks of the area. Copper-zinc deposits are found in rocks of the Keewatin series; considerable quantities of silver and gold are found in some of the copper-zinc deposits, as well as in vein deposits of the ordinary type; gold deposits are known both in the Keewatin and Timiskaming formations. Both gold and copper-zinc deposits appear to have been localized by structural factors. Molybdenite deposits are found only in two small areas in the eastern part of the region. They are formed apparently with the silicious end-product of the differentiation of biotite granite.

The sedimentary deposits of New Brunswick and Nova Scotia are described by W. J. Wright[5] and E. B. Papenfus.[7] Pyrite and chalcocite and their oxidation products occur as nodules and concretions or replacements of the cementing material of sandstone and conglomerates of Carboniferous age. The minerals are also found associated with and sometimes replacing plant remains that have turned to coal.

Gold.—Ira B. Joralemon, in the *Engineering and Mining World*, described the geology and recent developments at the Pioneer mine, Bridge River district, British Columbia. Augite diorite is intrusive at the contact of the Pennsylvania Bridge River series and upper Triassic Cadwallader series. Narrow but persistent gold quartz veins are found in the diorite and albitite. The development of the mine during the past few years has been very encouraging.

The gold, copper-nickel, and tin deposits of southeast Manitoba[1] are reported upon by J. F. Wright. In the Beresford-Rice Lake area, Precambrian sediments, volcanics, gabbro, diorite, granodiorite, granite, granite gneiss, pegmatite and diabase are found. Gold-bearing quartz veins, lenses and stringers occur along shear zones, irregularly scattered throughout the schistose and jointed volcanics. The Maskwa and Oiseau copper-nickel deposits lie in shear zones in vertical dipping andesite, pillow lava, and associated quartzose tuffs, close to the contacts of bodies of peridotite-gabbro and granite. The country rocks in the vicinity of Shatford and Bernic lakes, Oiseau area, consist of volcanics, peridotite, gabbro, granite, granodiorite and pegmatite. The known tin deposits are in the pegmatites characterized by abundant albite feldspar. Cassiterite occurs in small grains and crystals. No cassiterite-quartz veins have yet been located. Lithium-bearing pegmatites also occur in the area.

The geology of the San Antonio gold mine, Rice Lake area, Manitoba,[7] is outlined by J. A. Reid. Consequent on the granite intrusion, stresses fractured the greenstone, and schistified other rocks. The fracturing was accompanied or followed by mineralization solutions, emanating from the granite, which deposited quartz, gold, pyrite, rarely chalcopyrite and other minerals in the fissures.

The results of studies of a few areas in the vicinity of lake of the Woods and immediately north are presented by D. R. Derry[3], G. G. Suffel,[3] L. Greer,[3] J. G. Cross,[4] and E. M. Burwash.[3]

Derry describes the geology of the area from Minaki to Sydney lake as composed of Precambrian volcanics, sediments, and intrusions of granite and associated rocks. Veins of the replacement type consisting of pyrrhotite with a small amount of pyrite and molybdenite occur in the sedimentary gneiss along the granite contact; veins of the replacement type consisting of pyrite with chalcopyrite occur in the volcanic and quartzite sediments. The latter type is thought to be more favourable for the occurrence of economic deposits.

Precambrian volcanics, schists and intrusive rocks of various types including granite and diabase are described by G. G. Suffel as occurring in the Bigstone Bay area, Lake of the Woods. Narrow, lenticular quartz veins lie at or near the contact between the granite and the basic schists. Many showings are in the schist but some are in the granite itself. Visible gold and silver, pyrite, arsenopyrite, chalcopyrite, sphalerite, galena and tellurides have been reported.

The geology of Shoal Lake (west) area, Lake of the Woods, is indicated by L. Greer as consisting of Precambrian volcanics, sediments and granite and related intrusives. Gold occurs in rather narrow quartz veins in greenstones. Some sulphide-bearing fracture zones also carry gold.

A description of the geology of Kakagi Lake area, Lake of the Woods, is given by E. M. Burwash. Precambrian volcanics, sediments, gneisses, intrusive granite and associated dykes, and diabase occur in the area. Gold-quartz veins are found in schistified areas close to the granite and also in the granite.

J. G. Cross describes in detail the geology of the Sultana mine, Lake of the Woods, as consisting of Precambrian greenstones and basic Keewatin rocks intruded by an almost circular boss of granite with a central core of porphyry. The contact between the granite and porphyry is very decided and abrupt although it is apparent that both have a common origin. Along the westerly contact, in shear zones in the porphyry, gold-quartz veins containing pyrite, galena and zinc blende are found.

Preliminary reports are made upon Pipestone Bay section[3] and MacKenzie Island area,[3] Red Lake, Kenora district (Patricia portion), Ontario, by H. G. Young and E. L. Bruce. Gold-quartz veins carrying variable amounts of pyrite and occasional streaks and needles of tourmaline are found by Young in the Pipestone Bay area. In the MacKenzie Island area, E. L. Bruce reports gold-quartz veins as being found in sheared and altered granodiorite which is considered a marginal phase of the Howey granite boss.

North of the Albany River the Shonia Lake area,[5, 3] the Pickle Lake-Crow River area,[3] and the Fort Hope gold area[3] are described by H. C. Laird, M. E. Hurst, and L. F. Kindle. The rocks of the Shonia Lake area are found by Laird to consist of Precambrian volcanics, sediments and intrusives. Native gold occurs in a stockwork of quartz veins in altered granite. Hurst's study of the Pickle Lake-Crow River area reveals Precambrian volcanics, sediments, iron formation, and various intrusives including granite and allied rocks, and also diabase. Mineralization is associated with openings formed as a consequence of the folding and buckling of Keewatin rocks. Deposits so far discovered consist of gold-bearing quartz veins or silicified zones carrying auriferous sulphides. According to L. F. Kindle, the bed rocks of the Fort Hope gold area comprise Precambrian volcanics, sediments, quartz biotite, garnetiferous schist, and two ages of granite. Mineralization, consisting of pyrite, pyrrhotite, chalcopyrite, sphalerite and galena, is found in sheared greenstones usually where there is crystalline limestone.

Precambrian greenstones and sediments bordered on the north and south by extensive areas of granite and gneiss are found in the Sioux Lookout-Hudson area, Kenora district, Ontario,[3] by M. E. Hurst. Quartz veins carrying sphalerite, pyrite, and in some cases arsenopyrite and yielding interesting values in gold and silver were observed.

The results of an examination of the geology of the Sturgeon Lake gold area, Kenora and Thunder Bay districts, Ontario[3], are presented by A. R. Graham. Precambrian volcanics, sediments and intrusives occupy the area. Gold-quartz veins occur along lines of weakness in greenstones near the contact with and also in the granite.

A paper by Ellis Thompson upon tellurides at the Moss mine, Thunder Bay district, Ontario, appears in the University of Toronto Studies. The rocks in the immediate vicinity of the mine consist of basic and acid volcanics of Keewatin age intruded by feldspar lamprophyre and diabase. A mile to the east is the westerly end of a large boss of syenite with which the porphyry dykes are presumably genetically connected. The gold-quartz veins occur in shear zones striking northeast in the basic volcanics, in intimate association with narrow feldspar porphyry dykes. The gold is accompanied by petzite.

The geology of the Heron Bay area, Thunder Bay district, Ontario,[3] is described by J. E. Thomson. Precambrian volcanics are intruded by a number of rock types, including granite and diabase. Gold associated with sulphides in quartz veins occurring in schist has been reported to occur in the area.

A. R. Graham reports upon the Groundhog-Kamiskotia area, Cochrane district, Ontario.[3] Precambrian volcanics and various intrusives of different ages occupy the area. Gold-bearing quartz veins are found in Algoman porphyry dykes or in greenstone and gabbro adjacent to them. Pyrrhotite lenses containing chalcopyrite and nickel are found in the gabbro masses.

An account of the geology of Germain-Currie area, Cochrane district, Ontario,[3] is presented by H. C. Laird. Precambrian volcanics, sediments and intrusive dykes of different ages are found in the area. Gold-quartz veins mineralized with zinc blende, galena, chalcopyrite, bornite and garnet are found in shear zones in volcanics and in dykes of albite, syenite porphyry and quartz and feldspar porphyries. The gold mineralization appears to be connected with some phase of the Algoman intrusive. Nickeliferous pyrrhotite occurs along the contact between serpentine and andesite.

In the *Engineering and Mining World,* R. D. Hoffman outlines geological indications at Kirkland Lake, Ontario. Hoffman states that the "main break" of the area is a pivotal fault hinged at great depth to the west and dying out and coming to the surface at the Tough Oakes mine. This accounts for the rich ore at the surface at Tough Oakes mine, with subsequent impoverishment at depth and lack of real ore at the Teck Hughes until below the 500 foot level. The same idea of pitching of Kirkland Lake ore to the west in depth was advanced by J. B. Tyrrell.

Following a discovery of gold in Swayze township, Sudbury district, Ontario, examination of the locality and vicinity is made by H. C. Rickaby[3] and G. D. Furse.[3] In the area are found Precambrian volcanics, iron formation, sediments, granite diorite, porphyry and diabase. Deformation and faulting have taken place in part of the area rendering it more favourable prospecting ground. Gold-quartz veins have been found along fractures in the greenstones.

H. A. Laird describes the geology and economic possibilities of Chester and adjoining townships, Sudbury district, Ontario.[3] A strong belt of Keewatin sediments is flanked on either side by Keewatin volcanics. The continuity of this assemblage is interrupted by later intrusives of economic importance. Gold-quartz veins are found in fracture zones in quartz-porphyry. A noticeable feature of the veins carrying gold is the presence on the hanging wall or the foot wall of a mica lamprophyre.

A preliminary report on the gold deposits of Tyrrell and Knight townships, Sudbury district, Ontario,[3] is made by A. R. Graham. Keewatin volcanics, Huronian conglomerate, greywacke and quartzite, Nipissing diabase sills, and Algoman intrusives occupy the area. Gold-quartz veins are found in shear zones adjacent to lamprophyre and quartz-porphyry dykes.

A description of the Moose Mountain-Wanapitei gold area[3] is given by L. F. Kindle. Precambrian volcanics, sediments, granite and basic intrusives are found in the area. Gold-quartz veins occur in quartzites and impregnated greywacke-quartzite near diabase intrusions.

A preliminary report is presented by E. L. Bruce upon the geology of Janes, McNeish, Pardo and Dana townships, Ontario.[3] Precambrian sedimentary schist, gneisses, quartzite, conglomerate, diorite, granite, quartz-porphyry and diabase are found in the area. Gold-quartz veins occur in the diabase and quartzite.

In the Annual Report of the Quebec Bureau of Mines, J. A. Retty describes the geology of the Gaboury-Blondeau Townships map-area, Timiskaming county, Quebec, as consisting of Keewatin volcanics, pre-Timiskamian intrusives, altered Timiskamian sediments, Algoman granite and associated rocks and Keeweenawan intrusives. Those parts of the area that are occupied by Keewatin volcanics offer possibilities for the occurrence of gold, copper and asbestos.

L. V. Bell, in the Annual Report of the Quebec Bureau of Mines, provides a few reports upon certain portions of the eastern part of the Rouyn-Harricanaw area, Quebec, where interest in gold prospects prevails.

The geology of the Clericy-Joannes map-area is described by Bell as consisting of Keewatin volcanics, Timiskaming sediments, and post-Cobalt intrusives. The gold deposits are of two types: quartz veins and lenses parallelling the schistosity of the enclosing rocks, and networks of quartz stringers in carbonated rocks.

The rocks of the Central-Cadillac map-area, described by L. V. Bell, consist essentially of Timiskamian sediments and volcanics together with granite and allied intrusives. Gold deposits occur chiefly in narrow quartz veins which correspond in strike and dip with the schistosity of the enclosing rocks, which are intensely sheared volcanics lying within the sediments and intruded by dykes of aplite.

The vicinity of the Venus gold mine, Barraute township, is also described by Bell as being underlain by Keewatin volcanics. Gold-bearing quartz veins in which tourmaline, pyrite and chalcopyrite are present are found in shear zones in the greenstones.

Gold Placer.— J. D. Galloway and others, in a special bulletin of the British Columbia Bureau of Mines, summarize the placer-mining possibilities of the province. The section by R. W. Brock upon an appraisal of the placer resources of the Pacific Great Eastern Railway lands is of especial interest.

Iron.—C. K. Leith presents a paper upon secondary concentration of Lake Superior iron ores.[7] This paper is a critical examination of an article by J. W. Gruner in which the contention is advanced that the Lake Superior iron ores owe their secondary concentration to hydrothermal solutions emanating in the main from Keeweenawan basic intrusives. In concluding Leith states that the general hypothesis of concentration of iron ores by downward moving waters from the surface still seems to be adequate to cover the main body of the facts yet known.

Lead-Zinc.—J. MacIntosh Bell summarizes the genesis of the lead-zinc deposits at Pine Point, Great Bear lake, Northwest Territories.[7] The rocks in the vicinity are middle Devonian, comprising Slave Point shaly limestone, Presqu'ile dolomite and dolomitic limestone, and Pine Point limestone. The ore appears to occupy zones of intense jointing along anticlinal crests or domes in the Presqu'ile formation.

Ralph Tuck describes a lead-zinc deposit at Geneva Lake, in the northern part of Hess township, Sudbury district, Ontario.[7] Keewatin volcanics, Algoman granite, Bruce and Cobalt sedimentary series, and Keeweenawan granite and basic intrusives occupy the area. The ore body consists of an irregular tabular vein within greywackes and quartzites that contain injections of granite and alaskite.

Limestone.—A preliminary report on the limestones of British Columbia[2] is made by M. F. Goudge, giving descriptions of limestones at properties now being worked. Owing to the action of igneous intrusions and of mountain building agencies most of the limestones are highly metamorphosed. Along the coast and throughout the interior of the province are many deposits of limestone, some of which are of great size and many of which are very pure.

Oil and Gas.—A paper upon the Alberta syncline is presented by Theodore A. Link in the Bulletin of the American Association of Petroleum Geologists. Failure to encounter productive horizons in the Palæozoic limestones of the plains may be caused by the progressively lower bevelling of the older rocks to the east before the deposition of the Jurassic beds. The Turner Valley productive horizon has evidently been eroded away in the plains area prior to deposition of the Mesozoic beds.

Overthrust faulting and oil prospects of the eastern foothills of Alberta between the Bow and Highwood rivers, Alberta,[7] is the title of a paper written by G. S. Hume. The foothills are characterized by numerous nearly parallel reverse faults often of great length and mostly of unusual steepness. The faults dip 65 degrees to 75 degrees or more at the surface. Wells drilled in certain areas indicate two faults which although steep at the surface become low angle faults at depth with westerly dips of not more than 20 degrees. One of these faults underlies Turner Valley and has been penetrated by a few wells which after passing through a considerable thickness of Palæozoic limestone cut the fault and the Cretaceous strata beneath.

Phosphate.—Some problems of the Rocky Mountain phosphate field, Canada and the United States,[7] are indicated by G. R. Mansfield. At Banff, Alberta, and in the various British Columbian occurrences the beds corresponding with the phosphoria formation are part of a group included in the so-called Rocky Mountain quartzite.

Radium.—H. S. Spence gives a description of the occurrences of pitchblende and silver ores at Great Bear Lake, Northwest Territories.[2] Pitchblende is found in persistent vein systems within or along the contacts of highly sheared and brecciated greenstone bands which vary from ten to fifty feet in width. The mineral has been observed at points two miles apart on the veins. Beyond question these deposits constitute a valuable source of radium. Native silver in wire, leaf and dendritic forms occurs in quartz gangue and in calcite fillings in the sheared greenstone bands.

The Wilberforce radium occurrence, Ontario,[2] is described by H. S. Spence and R. K. Carnochan. The rocks in the area consist of crystalline limestone, sedimentary gneiss, amphibolite, gabbro, diorite, gneissic granite, and nepheline syenite and associated alkali-syenite. Uraninite is found in miarolitic cavities in coarse-grained feldspar pegmatite enclosed in gneiss.

Silver.—C. E. Cairnes describes the geology of Lightning Peak camp, Monaskee mountains, at the headwaters of the Granby river, Osoyoos district, British Columbia,[1] as consisting of crystalline limestone and altered volcanics intruded by granite batholiths and soaked with granite material from the batholith. Deposits of galena, sphalerite, pyrite, chalcopyrite, ruby silver, argentite, and native silver in a quartz calcite gangue are developed along shear zones, in the limestone and volcanics, striking east and west. Numerous quartz veins striking north and south and following along narrow dykes of quartz-porphyry carry pyrite, galena, sphalerite, chalcopyrite, grey copper and other high grade silver minerals, and low values in gold.

A comprehensive report is made by T. L. Tanton upon the Fort William-Port Arthur and Thunder Bay area, Thunder Bay district, Ontario.[1] Precambrian schists, sediments, granite, granite gneiss and diabase occupy the area. Silver is the chief economic feature. The known deposits of this metal are exhausted but many veins of silver-bearing type have not been thoroughly explored and it is possible silver concentrations occur in them. Numerous deposits of lead and zinc and some deposits of barite, molybdenum, iron and copper occur in the area.

Geological structure disclosed in the Keeley mine, Ontario,[5] is the subject of a paper by C. H. Boydell. The geological setting of the property consists of Keewatin basaltic and possibly andesitic flows showing pillow structure in places, intruded by lamprophyre dykes and a diabase sill. These rocks are intersected by faults which became the *loci* of silver-bearing copper-nickel veins with their attendant suite of essentially arsenide minerals and native silver. The author suggests further exploratory work in search of ore at the upper and lower contacts of the diabase. (See radium).

Sodium Sulphate.—A description of the sodium sulphate deposits of Saskatchewan is afforded by J. P. deWet.[4] Deposits of the salt are quite common throughout the province. A demand for a large tonnage of this mineral comes from the International Nickel Co., Sudbury, Ontario. Here nitre cake is used as a flux in separating copper and nickel.

Tin-Silver.—A tin-silver vein at the Snowflake mine, British Columbia, is described by H. C. Gunning.[7] Contorted, sheared and altered Precambrian quartzitic argillites and impure calcareous beds are cut by granite and granite gneiss of Mesozoic age. Following the bedding of carbonaceous argillites are a number of quartz veins. In one of these veins, irregularly distributed shoots, bunches, lenses or disseminations of pyrite, sphalerite, galena, stannite, chalcopyrite, tetrahedrite, ruby silver, scheelite and wolframite are found.

Zinc.—W. A. Parks in the Bulletin of the Geological Society of America describes the geology of Gaspé peninsula, Quebec. Cambrian to Carboniferous strata are excessively folded and much affected by igneous activity. Sulphides of zinc and lead occur in a zone of brecciated lower-Devonian strata near Brandy brook. Chalcopyrite occurs in Mount Serpentine region on Dartmouth river. Serpentized peridotite of Mount Serpentine and Mount Albert shows in places small grains of chromite and stringers of asbestos. Oil has been found in the Gaspé sandstones but no wells at present are producing.

Miscellaneous.—A comprehensive monograph upon chrysolite asbestos in Canada[2] is presented by J. G. Ross.

V. L. Eardley-Wilmot presents papers upon diatomite[2, 4, 5] describing its structure, types, composition, uses, Canadian consumption and future requirements, and world's occurrences and production.

Feldspar, its occurrence and uses in modern practice,[4] is the subject of an article written by Oliver Bowles and C. V. Lee.

The Amaranth gypsum deposit, northeast of Winnipeg, Manitoba,[5] which within the past year has been opened up and brought into production, is described by A. M. Brownell. At the present time, the gypsum appears to be giving a satisfactory product and gypsum plasters from the Winnipeg mill are being regularly supplied to the Western building trade.

J. P. Messervey in the Nova Scotia Report on Mines described manganese in Nova Scotia. The minerals of manganese are found as thin beds and irregular masses in superficial clay deposits and as metalliferous veins in granite and sediments.

A study of raw materials for the manufacture of "rock wool", in the Niagara peninsula of Ontario,[2] is made by M. F. Goudge.

SOURCES OF REPORTS AND ARTICLES REFERRED TO IN THE TEXT.

[1] Geological Survey, Department of Mines, Ottawa, Ont.; [2] Mines Branch, Department of Mines, Ottawa, Ont.; [3] Department of Mines, Toronto, Ont.; [4] *Canadian Mining Journal*, Gardenvale, Que.; [5] Canadian Institute of Mining and Metallurgy, Drummond Building, Montreal, Que.; [6] *Engineering and Mining Journal*, New York; [7] Economic Geology, New Haven, Conn., U.S.A.

PART III.—SEISMOLOGY IN CANADA.

An article on Seismology in Canada, by Ernest A. Hodgson, M.A., appeared at p. 37 of the Canada Year Book, 1931.

PART IV.—THE FLORA OF CANADA.

Under the above heading the Canada Year Book, 1922-23, contained an article prepared by the late J. M. Macoun, C.M.G., F.L.S., and M. O. Malte, Ph.D., and revised by the latter. See p. 25 of the 1922-23 edition or p. 73 of the 1921 edition.

PART V.—FAUNAS OF CANADA.

The Canada Year Book, 1922-23, contained an article under the above heading by P. A. Taverner of the Department of Mines, Ottawa. See p. 32 of the 1922-23 edition or p. 82 of the 1921 edition.

PART VI.—THE NATURAL RESOURCES OF CANADA.

The economic life of new countries must at first depend entirely, and later mainly, upon their natural resources. Older countries, after exhausting their most easily obtained resources, turn for a livelihood to manufacturing and similar pursuits, conserving their remaining resources and utilizing those of less developed areas as far as practicable.

Canada is distinctly a new country and her resources are for the most part in the early stages of development. The fur, fishery and forest resources have, it is true, been the basis of trade for two or three hundred years but exploitation on the present commercial scale is of relatively recent growth. A notable feature, especially in so young a country, has been the effort directed to conservation and, in the cases of those resources which admit of such methods, the actual replenishment or augmentation of the sources of supply by the practice of reforestation, sylviculture, fur-farming or the establishment of fish hatcheries.

In recent years numerous surveys and investigations of the extent and value of the resources have been made. A short summary of important details regarding them follows. Fuller information will be found in the introductions to later chapters —Agriculture, Furs, Fisheries, Forestry, Minerals, Water Powers—of this volume.

Agricultural Lands.—Of the total land area of the nine provinces (1,276,109,440 acres), it is estimated that approximately 352,157,190 acres are potential agricultural lands, including grazing lands associated with farm lands. The estimate is based on the best information available which, for the more northerly parts, is uncertain; the total is made up by adding to the area now occupied by agriculturists all lands considered to be possible of devotion to similar purposes. The area at present under cultivation is but a fraction of this total, the extent under field crops in 1932 being 59,633,500 acres, while the total area under pasture in the same year was 8,264,700 acres. Statistics of farm lands at the census of 1931 place the area then occupied at 163,254,959 acres; the area of what may be considered as agricultural land still available for occupation was, therefore, 188,902,231 acres. Details are given by provinces in Table 7.

7.—Area of Occupied and Estimated Potential Agricultural Lands in the Nine Provinces of Canada, 1931, with Estimated Land Area, 1933.

Province.	Area Occupied.[1]	Area Available for Occupation.	Total Potential Agricultural Land.[2]	Total Land Area, 1933.
	acres.	acres.	acres.	acres.
Prince Edward Island	1,191,202	66,988	1,258,190	1,397,760
Nova Scotia	4,302,031	3,789,969	8,092,000	13,275,520
New Brunswick	4,151,596	6,566,404	10,718,000	17,734,400
Quebec	17,445,089	26,299,911	43,745,000[3]	335,061,760
Ontario	22,840,898	42,996,102	65,837,000	232,500,480
Manitoba	15,131,685	17,248,315	32,380,000	140,622,720
Saskatchewan	55,673,460	24,400,540	80,074,000	152,304,000
Alberta	38,977,457	48,472,543	87,450,000	159,232,000
British Columbia	3,541,541	19,061,459	22,603,000[3]	223,980,800
Totals	**163,254,959**	**188,902,231**	**352,157,190**	**1,276,109,440**

[1] These figures are from the 1931 census and are subject to revision.

[2] These estimates have been made by the Topographical Survey, Department of the Interior.

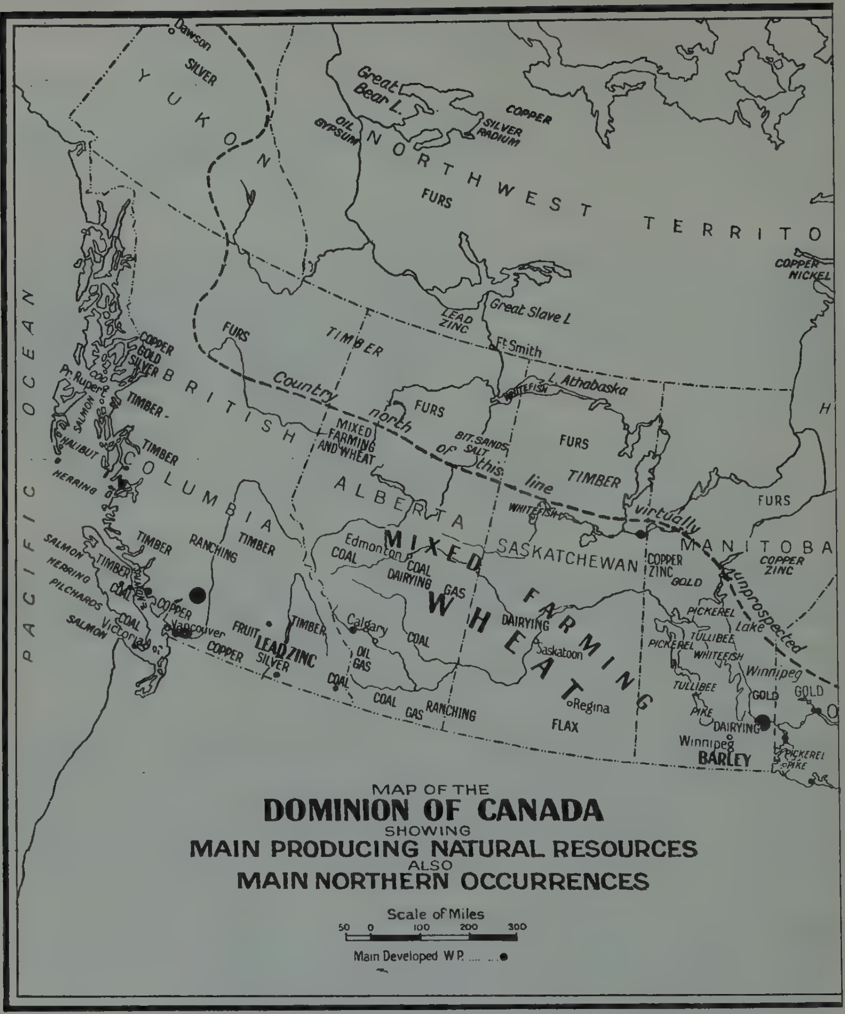
[3] Subject to revision.

Thus, in all the provinces but Prince Edward Island, large areas are still available for settlement, and while the nature of the soil and of the climate may in some cases restrict the variety of crops, in general the grain, root and fodder crops can be profitably grown in all the provinces, while stock raising is carried on successfully both in the more densely settled areas and beyond their frontiers.

The Maritime Provinces are noted for their fruit and vegetable crops, particularly for the oat and potato crops of Prince Edward Island and New Brunswick, and the apples of the Annapolis valley in Nova Scotia. Quebec and Ontario are pre-eminently mixed-farming communities, various districts specializing in dairying, tobacco, sheep, etc., while the Niagara peninsula in Ontario has long been famous for its fruit crops of both large and small varieties. In Manitoba, Saskatchewan and Alberta the production of grains, especially wheat, is still of primary importance but is giving way to more diversified types of agriculture, while the stock-raising industry, once so typical of the prairies, is regaining much of its former importance. In British Columbia the fertile valleys are devoted principally to apple and other fruit crops, and numerous districts along the coast and on Vancouver island are given over to general farming and market gardening.

Of the larger areas of land still available for settlement, the clay belt of northern Ontario and Quebec, which is suited to the growing of splendid crops, is to a large extent undeveloped, and even larger areas in northern Saskatchewan and Alberta await cultivation.

Forests.—The forests of Canada rank second only to agriculture in their contribution to the national income. It is estimated that forest products make up about 20 p.c. of all the freight hauled on Canadian railways, and the heavy excess of exports over imports which the wood and paper group provides, amounting to $143,732,101 for the fiscal year ended March, 1932, constitutes an important factor in Canada's balance of international trade.

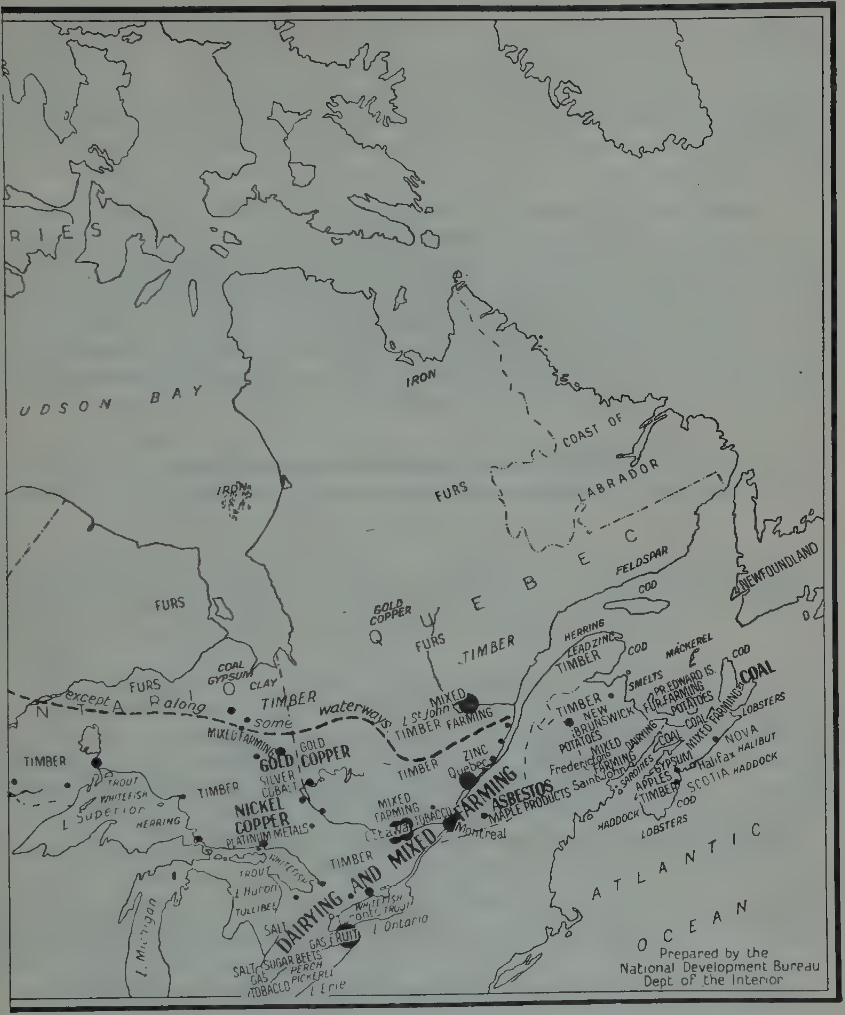


MAP OF THE
DOMINION OF CANADA
SHOWING
MAIN PRODUCING NATURAL RESOURCES
ALSO
MAIN NORTHERN OCCURRENCES

Scale of Miles
50 0 100 200 300
Main Developed W.P. ●
YUKON
Dawson
SILVER
NORTHWEST TERRITO
Great Bear L.
COPPER
SILVER
RADIUM
OIL
GYPSUM
FURS
COPPER
NICKEL
Great Slave L
LEAD
ZINC
Ft Smith
L. Athabaska
WHITEFISH
PACIFIC OCEAN
BRITISH COLUMBIA
COPPER
GOLD
SILVER
Pr. Rupert
SALMON
COD
TIMBER
HALIBUT
HERRING
FURS
TIMBER
Country north of this line virtually unprospected
MIXED FARMING AND WHEAT
FURS
BIT. SANDS
OF SALT
FURS
TIMBER
ALBERTA
SASKATCHEWAN
MANITOBA
FURS
COPPER
ZINC
Edmonton
COAL
MIXED FARMING
WHEAT
DAIRYING
GAS
SALMON
HERRING
PILCHARDS
SALMON
TIMBER
COAL
RANCHING
TIMBER
COPPER
Vancouver
Victoria
FRUIT
LEAD ZINC
SILVER
COPPER
TIMBER
Calgary
COAL
OIL
GAS
COAL
COAL
GAS
RANCHING
DAIRYING
Saskatoon
Regina
FLAX
COPPER
ZINC
GOLD
PICKEREL
TULLIBEE
PICKEREL
WHITEFISH
Lake Winnipeg
TULLIBEE
PIKE
GOLD
GOLD
DAIRYING
Winnipeg
BARLEY
PICKEREL
PIKE
H

Canada's forest area may be roughly divided into three main parts: (1) the great coniferous forest of the Pacific slope, (2) the northern forest, principally coniferous, which stretches from the east slopes of the Rockies, north of the prairies and of the Great Lakes to Labrador, and (3) the mixed softwood and hardwood forests extending from lake Superior through southern Ontario and Quebec to the Maritime Provinces.

Canada's forest area is estimated at 1,153,000 square miles, or 32·8 p.c. of the land area. Some of this is agricultural land, but it is considered that about 1,100,000 square miles is essentially forest land which can best be utilized in the production of wood. Not all of this area can be considered as capable of producing


R I E S
HUDSON BAY
IRON
IRON
COAST OF LABRADOR
FURS
Q U E B E C
FELDSPAR
COD
NEWFOUNDLAND
FURS
GOLD COPPER
FURS
TIMBER
COAL GYPSUM
CLAY
FURS
O N T A R I O
except along some waterways TIMBER
MIXED FARMING
GOLD
GOLD COPPER
SILVER COBALT
TIMBER
TROUT
WHITEFISH
L Superior
HERRING
TIMBER
NICKEL COPPER
PLATINUM METALS
L St John
MIXED FARMING
TIMBER FARMING
TIMBER
ZINC
Quebec
MIXED FARMING
Ottawa
TOBACCO
Montreal
FARMING
ASBESTOS
MAPLE PRODUCTS
TIMBER
WHITEFISH
TROUT
L Huron
TULLIBEE
L. Michigan
DAIRYING AND MIXED
WHITEFISH
Toronto TROUT
L Ontario
SALT
GAS FRUIT
SALT SUGAR BEETS
GAS
PERCH
TOBACCO
PICKEREL
L Erie
HERRING
LEAD ZINC
TIMBER
COD
MACKEREL
COD
SMELTS
TIMBER
NEW BRUNSWICK
POTATOES
MIXED FARMING
Fredericton
Saint John
DAIRYING
FUR FARMING
PR. EDWARD IS.
POTATOES
COAL
COAL
COAL
MIXED FARMING
LOBSTERS
SARDINES
GYPSUM
APPLES
TIMBER
Halifax
HALIBUT
NOVA SCOTIA
HADDOCK
HADDOCK
COD
LOBSTERS
ATLANTIC OCEAN

Prepared by the
National Development Bureau
Dept of the Interior

timber at the present time, only some 791,670 square miles being regarded as accessible and productive, of which 412,725 is young growth, leaving 378,945 square miles of land carrying timber of merchantable size. With regard to quantity of timber, the accessible stand has been estimated at 165,846 million cubic feet, or 290,230 million feet board measure of saw timber and 920,335,000 cords of pulpwood, cordwood, etc. The stands in Eastern Canada make up 64·3 p.c. of the total, those in British Columbia account for 24·2 p.c., leaving 11·5 p.c. of the accessible timber in the Prairie Provinces. During recent years the annual cut (estimated at 4,102,000,000 cubic feet in 1932) has generally exceeded the new growth, and enormous losses have been caused by fire and other destructive agencies. In spite of the vast extent of the uncut and unburned forests it cannot be said that the measures so far taken by legislation and the application of scientific forestry to preserve them and encourage their reproduction have been sufficient to assure us an adequate supply of timber for the future. Yet an annual increment of 10 cubic feet per acre, which is quite possible under forest management, would provide in perpetuity for the needs of a population of 17 millions at the present annual rate of use.

A classification of Canada's forest area is given in Table 8. The total of forest land is divided into the areas at present carrying timber of merchantable sizes or valuable young growth, and other areas unsuited for present exploitation. It may be pointed out, however, that many of these latter will develop into productive areas as the demand increases and transportation facilities are extended. The totals of forest land given in this table refer to areas which are on the whole better suited to forest production than to any other purpose, although they include about 26,652 square miles of occupied agricultural land at present covered with forest.

8.—Classification of Forest Land in Canada, 1932.

Province or Region.	Productive.								Non Productive.	Total Forested.
	Total.		Softwood Type.		Mixed Type.		Hardwood Type.			
	Merchantable.	Young Growth.	Merchantable.	Young Growth.	Merchantable.	Young Growth.	Merchantable.	Young Growth.		
	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
P. E. Island	485	240	485	240	-	-	-	-	-	725
Nova Scotia	7,470	4,480	5,000	3,000	670	480	1,800	1,000	50	12,000
New Brunswick	18,340	6,205	7,880	1,365	9,150	4,610	1,310	230	150	24,695
Quebec	213,500	90,000	164,400	54,000	42,700	23,400	6,400	12,600	70,000	373,500
Ontario	52,050	75,500	26,300	15,500	22,750	50,000	3,000	10,000	60,000	187,550
Totals, Eastern Provinces	**291,845**	**176,425**	**204,065**	**74,105**	**75,270**	**78,490**	**12,510**	**23,830**	**130,200**	**598,470**
Manitoba	4,615	25,885	1,835	9,115	1,100	5,120	1,680	11,650	62,500	93,000
Saskatchewan	7,305	34,855	1,745	7,155	2,045	7,350	3,515	20,350	40,000	82,160
Alberta	20,680	72,390	7,695	24,075	9,365	31,430	3,620	16,885	33,700	126,770
Totals, Prairie Provinces	**32,600**	**133,130**	**11,275**	**40,345**	**12,510**	**43,900**	**8,815**	**48,885**	**136,200**	**301,930**
British Columbia	53,500	94,170	53,500	94,000	-	170	-	-	44,935	192,605
Totals, All Provinces	**377,945**	**403,725**	**268,840**	**208,450**	**87,780**	**122,560**	**21,325**	**72,715**	**311,335**	**1,093,005**
Yukon and N.W. Territories	1,000	9,000	500	4,000	250	3,000	250	2,000	50,000	60,000
Totals, Canada	**378,945**	**412,725**	**269,340**	**212,450**	**88,030**	**125,560**	**21,575**	**74,715**	**361,335**	**1,153,005**

Forest products have always formed a large part of the raw material used in all kinds of industrial activity. At the present time products of forest origin form a quarter of our total exports, being exceeded only by the products of the farm.

Because of our climate, coniferous trees form over 80 p.c. of our forest resources and over 95 p.c. of our forest products as at present exploited. Because of their universal use in industry, the softwoods are in greatest demand, not only in Canada but in the markets of the world. Canada enjoys the reputation of holding the Empire's reserve of softwood timber, being rivalled in her coniferous forests only by Asiatic Russia and the United States. The Canadian species of both hardwoods and softwoods yield lumber and timber of dimensions and quality that are equal or superior to those produced by forests elsewhere.

Statistics of forest production (operations in the woods) in 1930 place its total value at $206,853,494, with a corresponding equivalent in standing timber of 3,056,930,373 cubic feet. The most important items are logs for sawing, valued at $75,563,041, and pulpwood for use and export, valued at $67,529,612. The total value of sawmill products in 1930 was $121,142,985 and that of pulp and paper-mill products $215,674,246.

Furs.—Although the rapid advance of settlement has greatly restricted the reservoir of fur-bearing animal life cradled in the vast expanses of northern Canada, yet Canada, after three and a half centuries of exploitation, still holds a foremost place in the ranks of the world's fur-producing countries.

Raw furs are at present the only economic return from hundreds of thousands of square miles of the area of the Dominion and are an important product in all the provinces and territories.

The large uninhabited areas of northern Quebec, Ontario, Manitoba and the Northwest Territories furnish subsistence for many of the most highly prized fur-bearing animals, among the most important of which are the beaver, fisher, various varieties of fox, marten and others. The animals are usually caught in traps during the winter months, when the country is more accessible than during the summer and the pelts are in the best condition. The successful breeding of the fox on fur farms came with the period of rising prices after 1890, and has since developed into an important industry. Prince Edward Island has always been the centre of the industry, but farms are now found in all provinces of the Dominion. On Dec. 31, 1930, 5,070 fox farms were in operation with a total of 114,066 foxes, principally of the "silver" variety.

Although the fox has proved the most suited to domestication, other kinds of fur-bearing wild animals are being raised in captivity—mink, raccoon, skunk, lynx, coyote, rabbit, marten and fisher. Karakul sheep, from which are obtained the furs known as "Persian lamb", "astrachan" and "broadtail" are also being raised successfully in Canada. In 1930 the number of farms engaged in the raising of fur-bearing animals other than foxes was 1,454. Mink farms are the most numerous of the miscellaneous class, muskrat farms coming second and raccoon third. Over 425 of the fox farms also raise miscellaneous fur-bearing animals in addition to the foxes.

The total value of the raw fur production of Canada for the season 1930-31 was $11,681,221. This total comprises the value of pelts of fur-bearing animals taken by trappers and of those raised on fur farms. Pelts sold from fur farms in the calendar year 1930 were valued at $3,096,270 and animals sold at $1,828,545.

Fisheries.—The first of Canada's resources to be exploited by Europeans was the fishing banks of the Atlantic coast. It is believed that, for many years before the actual discovery and settlement of North America, the cod banks south of Newfoundland and east of Nova Scotia had attracted French fishermen by their abundance of fish. These fishing grounds alone extend along a coast line of more than 5,000 miles, comprising an area of not less than 200,000 square miles, and are in the course of the cold Arctic current, a fact which tends greatly to improve the quality of the fish. The most important fishes of the off-shore fisheries are the cod, halibut, haddock, herring and mackerel, while the inshore and inland fisheries number the lobster, oyster, salmon, gaspereau, smelt, trout and maskinonge among their catches. Other fishing grounds include the inshore expanses of the St. Lawrence river; the Great Lakes, where whitefish and herring form perhaps the most valued catches, and innumerable other inland water areas abounding with trout, pike, bass and other game fish; and the Pacific coast. The fisheries of British Columbia, with its coast line of 7,000 miles, have in recent years shown a rapid development, and the products of the estuarian salmon fisheries of the Fraser, Skeena and other rivers now make up two-fifths of the value of fish products of the Dominion, while in addition large catches of halibut, herring and whales are made off the western coast. The total value of the fisheries in the calendar year 1931 was $30,517,306.

The above statistics give a general survey of the commercial aspects of the fisheries but do not indicate the advantages which Canada has to offer to those who fish for sport. This too has its economic features in a country of such famous game fish as the salmon of the Restigouche, the black bass of the Quebec and Ontario highlands and the trout of the Nipigon. A considerable public revenue is derived from the leasing of waters in sparsely settled districts to clubs and individuals for sporting purposes.

Minerals.—The numerous and varied mineral deposits of the Dominion form another of her most important resources. Mining is an old industry, coal having been produced in Nova Scotia and iron ore in Quebec early in the eighteenth century. The main development in the industry has taken place, however, in the twentieth century, during which there has been a great increase in the total and per capita production of minerals and mineral products.

There is a great variety of mineral products, metallic and non-metallic. Coal was for long the leading mineral, but in 1931 coal was exceeded in value by gold and in 1932 the preliminary figures for gold ($63,061,103) again exceeded those of coal ($37,045,272). Coal will probably remain in second place for some time although Canada's reserves of this fuel are known to be very great. The other leading non-metallic minerals were natural gas, asbestos, petroleum, salt and gypsum. Others that were produced to the annual value of over $100,000 each in 1932 were quartz, magnesite, sulphur, sodium sulphate, and talc and soapstone. In quantity of asbestos produced Canada leads the world, all of the production being from Quebec. Natural gas is produced in Alberta and Ontario and to a less extent in New Brunswick. The production of petroleum comes principally from Alberta, although there is also a small output in Ontario and New Brunswick.

The value of the metallic minerals was in 1932 nearly double that of the non-metallic minerals. Those amounting to more than $1,000,000 in the year were: gold, copper, nickel, silver, lead, zinc, and platinum and similar precious metals. Canada has now definitely taken second place among gold-producing countries.

Lead and zinc mining has made rapid progress in recent years although production is much curtailed at present owing to the low prices of these metals. Ontario meets about 90 p.c. of the world's requirements in nickel, and has reserves to last for centuries. Platinum and palladium are recovered in the process of refining the copper-nickel ores. Ontario, British Columbia, Quebec and Manitoba are the main copper-producing provinces; in the latter province large bodies of copper-zinc-sulphides are under development. The total mineral production for 1929 reached a record value of $310,850,000, while preliminary figures of the 1932 production were $182,320,150, prices having fallen seriously in the past two years.

Water Powers.—Canada's fresh water area of 226,979 square miles, distributed as it is throughout all parts of the country, provides a large amount of potential electric energy. It is estimated that 20,347,400 h.p. are available at a minimum yearly flow, 33,617,200 at ordinary six-months flow and that a turbine installation of 43,000,000 h.p. is possible. The installation at Jan. 1st, 1933, was 7,045,260 h.p., which represents only about 16·4 p.c. of the possible installation. Perhaps the greatest use to which these resources have yet been put has been in the pulp and paper industry, and to a lesser degree in the mining, the electro-chemical, the electro-metallurgical and the flour-milling industries. The water power utilized in the pulp and paper industry alone amounted on Jan. 1, 1933, to 1,608,000 h.p. Over 94 p.c. of the power available is in Quebec, Ontario, Manitoba and British Columbia; Quebec with 8,459,000 h.p. available at ordinary minimum flow, has the largest resources in the Dominion.

Game and Scenery.—Canada's resources as a country for the sportsman and tourist are both unique and varied. Owing to the growth of tourist travel and its demands, great areas of uninhabited land have become accessible, and hitherto almost unknown parts may now be reached and traversed with ease. The valleys of Nova Scotia and New Brunswick, the broken lake country of northern Ontario and Quebec, as well as the mountain districts of British Columbia, offer to the tourist, the hunter and the fisherman new scenic effects and innumerable game preserves, and have won for the Dominion a reputation as a paradise for sportsmen and campers. And not only is this possible for those who travel by land; the series of lakes and rivers which form a network over the eastern part of the country particularly, has made water travel in smaller craft both feasible and attractive. Further, facilities for winter sports, the unusual attractions of winter scenery and the bracing though rigorous winter climate, have done much to add to the reputations of resorts formerly noted for their advantages in the summer season.

The Dominion Government maintains, as the medium through which some of the most outstanding natural beauties of the country may be preserved and popularized, the National Parks Branch of the Department of the Interior, administering the scenic parks set aside for this purpose. Under the supervision of this same body are numerous animal reserves and historic sites which have been preserved throughout the country. Several of the provinces also maintain parks for similar purposes; among these the Algonquin park (2,741 square miles) in Ontario and the Laurentides park (3,565 square miles) in Quebec are the most important. In both Dominion and provincial parks, the hunting of game is forbidden, and the wild-life resources preserved. Elsewhere, however, there is available for the hunter and angler, at proper seasons, a wealth of game species. The deer and moose of Eastern Canada, the bear and mountain sheep of the Rockies, game animals, birds and fishes in unusual variety, have given the Dominion exceptional advantages for this means of recreation.

A list of the Dominion national parks and reserves is given in Table 9.

9.—Canadian National Parks and Reserves, 1933.

Park.	Location.	Date of Establishment.	Area.
			sq. miles.
Scenic Parks.			
Banff National Park.✓	Alberta, east slope of Rockies	1885	2,585
Yoho Park.✓	British Columbia, west slope of Rockies	1886	507
Glacier Park.✓	British Columbia, summit of Selkirks	1886	521
Revelstoke Park.✓	British Columbia	1914	100
Kootenay Park.✓	British Columbia	1920	587
Jasper Park.✓	Northern Alberta	1907	4,200
Waterton Lakes Park	Southern Alberta, adjoining U.S. Glacier Park	1895	220
St. Lawrence Islands.✓	Ontario	1904	(180·8 acres)
Pt. Pelee Park.✓	Ontario, on lake Erie	1918	6
Georgian Bay Islands Park.✓	Ontario	1929	4·6
Riding Mountain Park.✓	Manitoba	1929	1,148
Prince Albert Park.✓	Saskatchewan	1927	1,869
Tar Sand Reserve[1][2]	Alberta	1926	(2,068·2 acres)
Animal Parks and Reserves.			
Buffalo Park.✓	Near Wainwright, Alberta	1908	197·5
Elk Island Park.✓	Near Lamont, Alberta	1911	51
Nemiskam (Antelope).✓	Alberta	1922	8·5
Wawaskesy (Antelope).✓	Alberta	1922	54
Wood Buffalo Park[2]	Alberta (13,675 sq. miles) Northwest Territories (3,625 sq. miles)	1922	17,300
Historic Parks.			
Fort Anne	Annapolis Royal, Nova Scotia	1917	(31 acres)
Fort Beauséjour	New Brunswick	1926	(59 acres)

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[1] Reserved by order in council and became a Dominion reserve by agreement with the province of Alberta in 1931. [2] Administered by the Dominion Lands Administration of the Department of the Interior.

PART VII.—CLIMATE AND METEOROLOGY.

Section 1.—The Climate of Canada.

An article on this subject by Sir Frederic Stupart, Director of the Dominion Meteorological Service, Toronto, appeared in the 1929 edition of the Year Book at pp. 42-51.

Section 2.—The Factors which Control Canadian Weather.

Under the above heading, Sir Frederic Stupart, Director of the Dominion Meteorological Service, Toronto, contributed an article which appeared at pp. 26-31 of the 1924 edition of the Year Book, also at pp. 36-40 of the 1925 edition.

Section 3.—The Distribution of Precipitation in Canada.

An article on "The Distribution of Precipitation in Canada", contributed by A. J. Connor, Climatologist, Dominion Meteorological Office, Toronto, appeared at pp. 42-46 of the 1926 edition of the Year Book.

Section 4.—The Temperature and Precipitation of Northern Canada.

An article on the climate of northern Canada, accompanied by meteorological tables showing the normal temperature and precipitation at selected northern stations, was contributed by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, to the 1930 edition of the Year Book, where it will be found at pp. 41-56.

Section 5.—The Meteorological Service of Canada.

Under the above heading Sir Frederic Stupart contributed a short article descriptive of the growth and present activities of the Meteorological Service, to the 1922-23 edition of the Year Book (pp. 43-47); to it the interested reader is referred.

Section 6.—Meteorological Tables.

Tables showing the normal temperature and precipitation at selected Canadian stations in each of the provinces, together with the recorded extremes, also the averages of sunshine, wind and weather at such stations, will be found at pp. 51-63 inclusive of the 1927-28 edition of the Year Book. The 1931 edition of the Year Book contains at pp. 48-76 additional and more comprehensive tables, contributed by A. J. Connor, of monthly average temperatures and precipitation throughout Canada, as well as of normal snowfall and duration of bright sunshine.

Section 7.—Droughts in Western Canada.[1]

The scarcity of rainfall in Western Canada in recent years has been the reason for frequent requests that the Meteorological Service should supply the figures of annual rainfall and snowfall for a long period of years. Some of our correspondents have suggested that there was some law of periodicity governing the precipitation of Western Canada. Several of our correspondents have also objected to annual figures which are the totals of the twelve calendar months of each year. To meet the needs of those who wish to inquire into possible periodicities, there are supplied on the following pages tables of the annual precipitation, arranged to cover the crop year from Aug. 1 to the 31st of the following July. These are to be found in Table **9** under the heading "P_{12}". In a parallel column is given the average temperature of the months of May, June and July of the corresponding year. Since the mean temperature of the actual growing period (which is nearly that of May, June and July) gives a fairly reliable indication of the temperature of the soil, it was thought that these would be the most useful temperature data. Dividing the figures in the first column by those in the second column and multiplying by a constant, we obtain a quotient listed under the heading "Q". The soil moisture varies directly as the precipitation and inversely as the temperature of the soil. The figures listed under "Q" should, therefore, give some indication of the average soil moisture during the growing season of each year. Since there are no actual observations of soil moisture available (except those made at a few scattered points several years ago under the supervision of Dr. F. T. Shutt, Dominion Chemist), we can assign no absolute meaning to these quotients. All we can say is that they afford some reasonable basis for the inter-comparison of the individual years. In the diagrams the yields of wheat for a few recent years have been plotted alongside the values of "Q" for the nearest representative station.

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[1] Contributed by A. J. Connor, Climatologist, Meteorological Service of Canada.

It has also been urged by our correspondents that the success of western crops was not totally dependent upon the weather of the current year but also upon the weather of the immediately preceding years. Although several suggestions of this nature have been propounded, they may be briefly summarized by saying that two dry years in succession have a more detrimental effect upon the crop of the second year than a single contemporary dry season and that a good third year does not compensate for two previous dry years. For the benefit of those who would like the data arranged to suit this viewpoint, a second table has been included in which the quotients are arranged by progressive means and described as "weighted quotients" (Qw). These means were obtained by the following formula:—

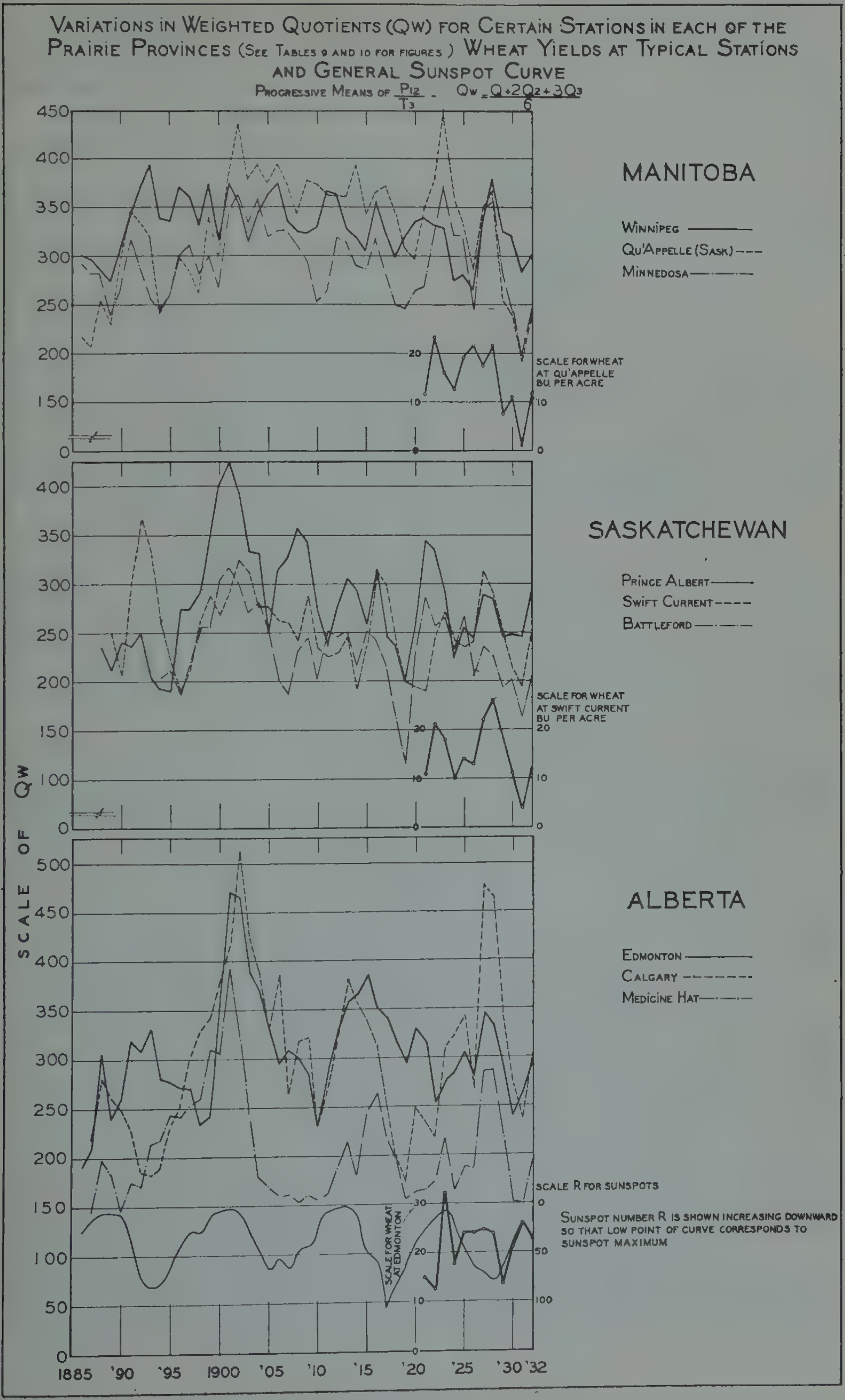
$$\frac{a + 2b + 3c}{6}$$

The mean so obtained is credited to the year c. For the year d the figure is obtained from the formula:—

$$\frac{b + 2c + 3d}{6}$$

and so on up to the year 1932. In the accompanying diagrams these progressive quotients have been arranged to show the graphic history of western weather from this standpoint.

During the last fifty years there have been many meteorological stations established on the prairies but few of them have lasted very long. To obtain reliable district values for each year, using a shifting station network, we must submit the crude figures to considerable statistical transformations. It was, therefore, considered better for the present purpose to give the actual figures for a representative station of long continued record in each section of the west. The stations


VARIATIONS IN WEIGHTED QUOTIENTS (QW) FOR CERTAIN STATIONS IN EACH OF THE PRAIRIE PROVINCES (SEE TABLES 9 AND 10 FOR FIGURES) WHEAT YIELDS AT TYPICAL STATIONS AND GENERAL SUNSPOT CURVE
PROGRESSIVE MEANS OF P12/T3 - QW = (Q+2Q2+3Q3)/6
MANITOBA
WINNIPEG
QU'APPELLE (SASK)
MINNEDOSA
SCALE FOR WHEAT AT QU'APPELLE BU. PER ACRE
SASKATCHEWAN
PRINCE ALBERT
SWIFT CURRENT
BATTLEFORD
SCALE FOR WHEAT AT SWIFT CURRENT BU PER ACRE
ALBERTA
EDMONTON
CALGARY
MEDICINE HAT
SCALE FOR WHEAT AT EDMONTON
SCALE R FOR SUNSPOTS
SUNSPOT NUMBER R IS SHOWN INCREASING DOWNWARD SO THAT LOW POINT OF CURVE CORRESPONDS TO SUNSPOT MAXIMUM
SCALE OF QW
450
400
350
300
250
200
150
100
50
0
500
30
20
10
0
50
100
1885
'90
'95
1900
'05
'10
'15
'20
'25
'30
'32

chosen, Edmonton, Calgary, Medicine Hat, Swift Current, Battleford, Prince Albert, Qu'Appelle, Minnedosa and Winnipeg, are each in the approximate centre of a district of fairly distinct rainfall and temperature characteristics. In the diagram they have been arranged in related groups of threes. In the first diagram for the Alberta group the weighted "Q" informs us strikingly that:—

(1) At Edmonton the variation throughout the period has remained within narrower amplitudes than at Calgary or Medicine Hat.

(2) The Calgary climate can be, agriculturally, much better or much worse than the Edmonton climate.

(3) Medicine Hat, although subject to violent variations, is always at a lower level than the other two districts.

(4) Despite all these peculiarities there have been major pulsations which are recognizably prominent in all three. From the late '80's the general average of soil moisture (if this interpretation of Qw is sound) gradually improved to reach a peak shortly after 1900; in 1901 at Edmonton and Medicine Hat and in 1902 at Calgary.

(5) From 1902 the general average slips downward, steadily at Medicine Hat but with occasional slight recoveries at Edmonton and Calgary. The bottom was reached in 1910 at Edmonton and Calgary but Medicine Hat had already bottomed in 1905 and stayed down till Edmonton and Calgary reached the lowest point.

(6) Thereafter some force seems to have rapidly pulled values upwards to a peak, in three years at Calgary, five at Edmonton and six at Medicine Hat. Thence the trend is downwards to 1919. After irregular fluctuations there is a peak in 1927 followed by a plunge downward to the very poor annual values of recent date. The curve in 1932, although upward, may indicate only that we are starting a period of irregular fluctuations. The assumption that the values will be gradually mounting on the average is by no means certain but would appear probable.

If there are uniformly recurring periodicities in western weather, the smooth values given by the progressive method which produced Qw should make these periodicities very evident. We have seen that there have been long period pulsations affecting Alberta. Pulsations are periodic if they recur at regular intervals. If the intervals are irregular, there is no periodicity. This does not, however, preclude the possibility that the pulsations are due to the beats or interactions caused by simultaneous forces whose periods are mutually incommensurable. This latter possibility is, of course, beyond inquiry at the present time. All that our correspondents had in mind was simply a period such as the sun-spot period. Examining the curve we may take the intervals between peaks and between valleys.

The peak at Edmonton in 1893 appears anomalous but there is a common peak in 1888, one in 1901 or 1902, one in 1913, 1915 or 1916 and another in 1927 or 1928. Intervals are 13 or 14 years, then 11 or 14 or 15 according to the station considered, while the last interval is 11, 12 or 14. The average for the three stations is slightly more than thirteen years. The valleys are not certain at the beginning of the record but we recognize major ones in 1910, 1919 and 1930 or 1931. These give intervals of 9 and 11 or 12 years. If we consider the early one as having occurred in 1889 or 1890, we have another interval of 10 or 11 years. Medicine Hat and Edmonton, however, started with a valley in 1885 or 1886 so that the first interval is doubtful. All these intervals are so sufficiently close to the sun-spot intervals that one may say that a force going through approximately the same cycle as the sun-spot frequency affects prairie weather. This, however, becomes apparent only when the weather values are thoroughly smooth. Reference to Table **9** shows that the individual annual values are subject to very large fluctuations of much shorter intervals than the sun-spot period. These shorter fluctuations are of such violence that they have a very large immediate effect upon the crops of the corresponding year.

Turning now to the group of three stations in Saskatchewan, we find minima in 1890, 1895, 1905, 1914, 1919 and 1931. These give intervals of 5, 10, 9, 5 and 12 years. It must be admitted, however, that major minima are more difficult to recognize than in Alberta. From 1895 to 1919 is approximately twice the sun-spot period and that from 1919 to 1931 is very close to a sun-spot interval. Looking at the maxima we find them in 1892, 1901, 1916, 1921 and 1927. All three stations do not come to a major maximum in the same year, so that the actual intervals between peaks are somewhat doubtful. On the whole the case for solar influence in Saskatchewan is rather weak.

The last group of three consists of Qu'Appelle in southeastern Saskatchewan and two stations in Manitoba. At these three stations the smooth curves on the whole do not show such large fluctuations. The maxima are in about 1891, 1901, 1923, with somewhat doubtful peaks about 1912 and 1927. It is possible to pick the peaks so as to get intervals approximating those of the sun-spot intervals but the result is not very satisfactory. There are minima about 1889, 1900, 1910, 1920 and 1930, so that if we neglect the fairly well marked minima about 1894 and 1926 we have a rather better case for solar influence.

Since visual examination of the curves is rather unsatisfactory the figures were subjected to a statistical analysis. That for Q and the sun-spot numbers is given in Table **11**. Qw was treated in the same way. The averages of both Q and Qw for each year of the sun-spot cycle are plotted on the diagram. The period was taken as 12 years (since the actual time, although variable, is greater than 11 years). The height of the curve at both ends (corresponding to sun-spot minima) is therefore not identical.

Four sun-spot maxima have occurred during the time for which we have data. The data, thus analyzed, indicate that the weather in the Canadian West from the farmers' standpoint may be expected to reach a peak of beneficence about sun-spot minimum; to fall sharply in the two succeeding years; then rise to a secondary peak one year before the sun-spot maximum; fall steeply at maximum sun spots and the following year; thereafter to rise slowly to a peak at the next sun-spot minimum.

A few figures of district yields of wheat are plotted on the diagrams. Enough evidence to show that weighting the weather data of one year by those of the two preceding years is not generally good practice is seen by the comparative failure of the wheat yields at Edmonton and Qu'Appelle to parallel the weighted weather figures. The parallelism for Swift Current is, however, surprisingly good. In fact, although there is a very good positive correlation in the West between annual rainfall and wheat yields and a good negative one between summer temperature and yields, yet the annual figures got by combining temperature and rainfall are far from exactly paralleling the yield figures. Undoubtedly the distribution of heat and moisture throughout the period of growth is a very important factor, of which we have taken no account in our tables or curves.

The relation of sun-spot numbers to wheat weather and to wheat yields is therefore of no value for predicting the yield of any particular year, but does appear to indicate an irregularly cycloidal march of these variables through the years.

Since we have given the annual values of both precipitation and summer temperature, there are sufficient data for those who wish to consider this matter further.

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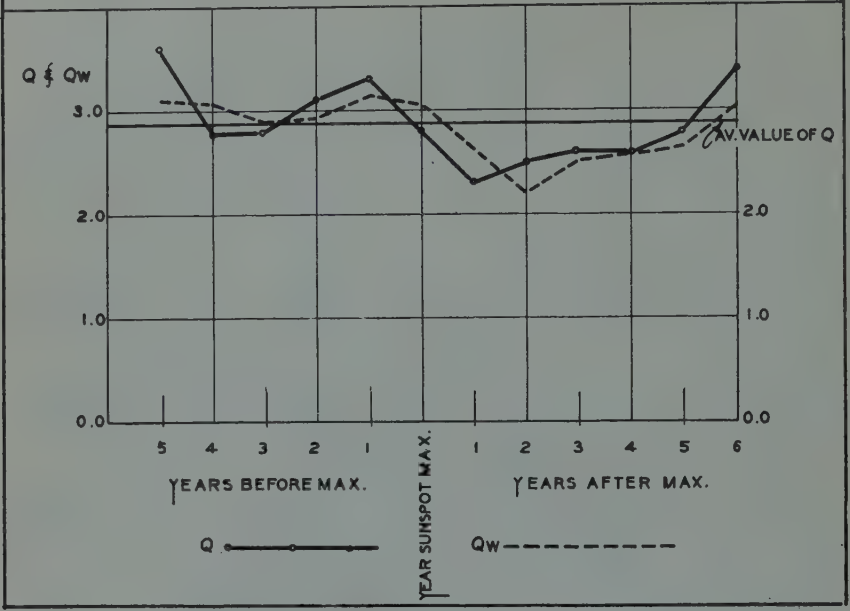

AVERAGE FLUCTUATIONS OF Q AND QW FOR 6 DISTRICTS SINCE BEFORE THE SUNSPOT MAXIMUM OF 1893 THROUGH 4 MAXIMA TO 1932 (SEE TABLE 11 FOR FIGURES)

9.—Precipitation in Crop Years and Temperature in the Growing Period at Certain Western Points, together with Quotients when Precipitation is Divided by Temperature, 1883-4-1932.

NOTE.—Quotients have in all cases been multiplied by 10.

EDMONTON.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1883-84	12·53	55·8	2·24	1909	15·15	57·1	2·66
85	16·06	55·8	2·44	10	10·82	57·1	1·90
86	8·30	57·2	1·45	11	20·90	56·8	3·68
87	13·00	53·9	2·42	12	20·18	57·9	3·48
88	21·84	54·4	4·02	13	20·25	56·4	3·60
89	7·37	57·6	1·28	14	21·47	57·4	3·74
90	16·97	56·5	3·01	15	21·95	54·9	4·00
91	22·40	56·9	3·94	16	17·19	55·0	3·12
92	13·76	54·8	2·51	17	19·34	56·4	3·43
93	19·94	56·2	3·55	18	16·52	55·0	3·00
94	14·33	58·7	2·44	19	15·66	57·0	2·75
95	15·50	56·7	2·73	20	21·01	56·2	3·74
96	16·06	57·4	2·80	21	16·62	57·4	2·90
97	15·15	58·6	2·58	22	10·88	57·8	1·90
98	11·97	59·0	2·03	23	18·86	57·5	3·28
99	14·44	55·1	2·62	24	16·43	57·4	2·87
1900	27·87	58·1	4·81	25	17·96	57·8	3·11
01	29·81	56·2	5·32	26	14·83	57·2	2·60
02	23·14	55·5	4·16	27	22·63	55·0	4·13
03	18·10	56·2	3·22	28	17·66	58·1	3·04
04	21·98	56·4	3·89	29	13·56	56·9	2·38
05	16·85	57·1	2·97	30	12·57	56·6	2·22
06	15·33	57·9	2·62	31	17·15	56·9	3·01
07	18·48	53·7	3·44	32	18·63	58·3	3·19
08	16·65	57·9	2·88				

9.—Precipitation in Crop Years and Temperature in the Growing Period at Certain Western Points, together with Quotients when Precipitation is Divided by Temperature, 1883-4-1932—continued.

Note.—Quotients have in all cases been multiplied by 10.

CALGARY.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1884-85	14·65	53·7	2·74	1909	16·67	54·9	3·04
86	11·58	56·8	2·04	10	7·81	56·7	1·38
87	11·52	54·6	2·12	11	19·39	53·9	3·59
88	19·17	54·2	3·53	12	20·54	55·4	3·70
89	12·15	55·5	2·18	13	16·66	56·4	2·96
90	13·27	55·9	2·37	14	16·81	58·3	2·90
91	12·76	56·0	2·27	15	20·85	54·2	3·86
92	7·54	54·6	1·41	16	15·11	55·0	2·75
93	10·55	54·5	1·93	17	10·96	56·1	1·95
94	11·47	57·0	2·01	18	9·91	57·2	1·73
95	14·47	54·4	2·66	19	9·93	58·7	1·68
96	14·64	56·3	2·60	20	18·45	56·3	3·28
97	19·85	58·0	3·43	21	11·93	58·1	2·06
98	19·06	56·1	3·39	22	11·03	58·2	1·90
99	18·07	52·6	3·45	23	24·28	57·2	4·25
1900	22·39	53·8	4·15	24	17·27	57·2	3·02
01	23·86	54·0	4·41	25	19·48	57·5	3·39
02	31·03	52·2	5·94	26	17·87	57·5	3·12
03	21·90	53·6	4·10	27	33·91	53·6	6·32
04	16·95	54·4	3·11	28	25·01	57·3	4·02
05	17·07	53·8	3·18	29	11·79	56·5	2·08
06	14·26	55·5	2·57	30	15·02	55·2	2·73
07	13·33	53·1	2·51	31	12·64	56·2	2·25
08	21·53	56·4	3·82	32	20·30	55·7	3·64

MEDICINE HAT.

1884-85	13·64	61·1	2·23	1909	10·42	61·9	1·68
86	6·49	64·8	1·00	10	5·43	64·8	0·84
87	8·97	59·6	1·50	11	13·08	62·3	2·10
88	15·17	60·0	2·53	12	13·07	62·9	2·08
89	8·84	61·3	1·44	13	14·13	64·2	2·20
90	6·81	62·2	1·09	14	9·44	65·6	1·44
91	13·87	60·9	2·28	15	19·19	60·5	3·17
92	9·18	59·5	1·54	16	16·34	60·9	2·68
93	15·37	61·6	2·50	17	9·89	64·5	1·53
94	13·93	64·2	2·17	18	12·94	63·6	2·03
95	15·48	60·2	2·57	19	8·36	67·0	1·25
96	14·86	62·4	2·38	20	11·14	63·7	1·75
97	16·41	63·1	2·60	21	11·36	65·6	1·73
98	16·35	62·0	2·64	22	11·88	65·0	1·83
99	20·90	59·4	3·52	23	16·72	65·5	2·55
1900	18·64	64·8	2·88	24	6·35	64·0	0·99
01	28·52	60·2	4·74	25	14·67	64·3	2·28
02	14·29	59·0	2·42	26	12·18	65·1	1·87
03	10·19	60·6	1·68	27	22·39	60·3	3·71
04	10·15	62·4	1·63	28	16·68	63·0	2·65
05	10·23	59·9	1·71	29	8·87	63·1	1·41
06	9·36	61·5	1·52	30	7·86	63·2	1·24
07	9·71	59·0	1·65	31	10·71	62·3	1·72
08	9·33	63·7	1·46	32	14·69	62·4	2·35

BATTLEFORD.

1891-92	8·33	55·5	1·53	1902	15·08	56·1	2·68
93	12·17	58·8	2·07	03	14·63	57·4	2·56
94	13·33	61·8	2·16	04	17·24	57·5	3·00
95	12·06	57·8	2·09	05	12·48	57·0	2·19
96	13·63	59·4	2·30	06	9·15	59·1	1·55
97	13·26	60·2	2·20	07	8·83	55·0	1·60
98	17·13	59·5	2·88	08	17·76	59·2	3·00
99	13·91	57·1	2·44	09	13·87	59·2	2·34
1900	20·81	60·2	3·46	10	8·59	58·8	1·46
01	18·77	59·1	3·23	11	18·75	57·4	3·27

9.—Precipitation in Crop Years and Temperature in the Growing Period at Certain Western Points, together with Quotients when Precipitation is Divided by Temperature, 1883-4-1932—continued.

NOTE.—Quotients have in all cases been multiplied by 10.

BATTLEFORD—concluded.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1912	13·53	60·0	2·26	1923	17·97	61·0	2·94
13	13·99	57·9	2·42	24	6·21	58·1	1·07
14	12·04	61·7	1·95	25	15·58	59·7	2·60
15	17·07	58·0	2·94	26	11·80	59·0	2·00
16	12·76	57·1	2·23	27	14·34	57·4	2·50
17	11·40	60·5	1·88	28	12·98	59·5	2·19
18	10·94	57·5	1·90	29	8·94	58·3	1·56
19	6·49	62·3	1·04	30	13·09	58·6	2·23
20	19·24	58·8	3·28	31	7·29	59·5	1·23
21	19·65	61·6	3·19	32	14·72	59·6	2·47
22	11·51	61·2	1·88				

PRINCE ALBERT.

1885-86	8·49	56·0	1·52	1910	11·19	57·4	1·96
87	16·29	54·6	2·96	11	12·81	56·4	2·27
88	12·32	55·9	2·20	12	19·41	57·7	3·36
89	9·53	54·6	1·74	13	17·94	57·5	3·10
90	15·55	53·3	2·92	14	15·84	59·4	2·67
91	12·07	54·9	2·20	15	12·65	54·4	2·32
92	13·91	54·4	2·56	16	17·99	56·8	3·17
93	9·33	57·3	1·63	17	12·02	58·8	2·04
94	11·40	59·2	1·93	18	12·76	55·5	2·30
95	11·19	56·4	1·98	19	11·10	62·1	1·79
96	20·75	57·8	3·59	20	18·56	58·6	3·17
97	13·92	57·4	2·42	21	25·34	60·6	4·18
98	17·36	57·6	3·01	22	17·03	59·7	2·85
99	23·19	55·5	4·18	23	15·37	59·4	2·59
1900	24·62	58·2	4·23	24	10·04	56·3	1·78
01	25·54	58·5	4·37	25	17·90	58·8	3·04
02	19·62	55·4	3·54	26	13·16	58·6	2·25
03	15·78	55·3	2·85	27	18·20	56·5	3·22
04	19·94	56·2	3·55	28	12·94	59·3	2·18
05	9·23	56·3	1·64	29	11·78	57·2	2·06
06	23·22	57·5	4·04	30	15·58	58·3	2·67
07	17·50	53·1	3·30	31	14·40	59·0	2·44
08	20·59	57·4	3·59	32	20·70	60·4	3·43
09	20·04	57·3	3·44				

SWIFT CURRENT.

1886-87	16·48	57·7	2·85	1910	10·05	59·8	1·68
88	13·82	56·3	2·46	11	13·18	58·4	2·25
89	13·56	57·4	2·36	12	15·02	58·7	2·51
90	10·22	59·5	1·72	13	14·63	59·0	2·48
91	23·96	57·7	4·15	14	8·25	61·8	1·34
92	22·65	56·8	3·95	15	17·18	56·0	3·06
93	15·47	59·4	2·60	16	21·30	57·0	3·74
94	13·57	63·1	2·15	17	14·29	59·7	2·39
95	12·32	57·9	2·13	18	11·66	60·0	1·94
96	9·86	61·0	1·62	19	12·20	64·0	1·90
97	15·53	61·7	2·52	20	11·91	60·5	1·97
98	17·84	59·4	3·00	21	11·54	62·1	1·86
99	16·56	57·1	2·90	22	18·02	59·8	3·01
1900	15·16	63·3	2·40	23	16·98	61·3	2·77
01	19·82	60·8	3·26	24	11·21	57·5	1·95
02	20·01	57·6	3·48	25	16·38	66·0	2·48
03	16·34	57·9	2·82	26	15·21	61·2	2·49
04	14·74	59·0	2·50	27	21·74	57·9	3·76
05	16·62	57·0	2·90	28	17·58	61·0	2·48
06	15·05	59·2	2·48	29	12·24	59·3	2·07
07	13·91	54·3	2·57	30	12·30	59·8	2·06
08	13·68	60·1	2·28	31	11·22	62·8	1·79
09	19·75	58·6	3·37	32	19·15	61·0	3·14

9.—Precipitation in Crop Years and Temperature in the Growing Period at Certain Western Points, together with Quotients when Precipitation is Divided by Temperature, 1883-4-1932—continued.

NOTE.—Quotients have in all cases been multiplied by 10.

QU'APPELLE.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1883-84	12·35	58·2	2·12	1909	23·96	56·6	4·23
85	14·30	56·0	2·55	10	20·58	57·0	3·61
86	11·87	61·4	1·93	11	19·19	55·8	3·44
87	11·60	58·4	1·99	12	21·12	56·4	3·74
88	17·62	55·8	3·16	13	20·32	56·6	3·59
89	10·60	57·9	1·83	14	20·88	49·6	4·21
90	20·45	57·7	3·54	15	15·38	54·2	2·84
91	22·14	55·8	3·97	16	22·88	56·7	4·03
92	15·58	54·4	2·86	17	22·03	58·0	3·80
93	18·34	58·3	3·15	18	17·15	56·9	3·01
94	10·75	61·9	1·74	19	18·00	62·5	2·88
95	16·87	56·6	2·98	20	17·55	59·0	2·97
96	20·02	58·7	3·41	21	24·50	61·0	4·02
97	14·32	59·0	2·43	22	23·27	59·5	3·91
98	14·45	58·0	2·49	23	30·79	60·5	5·08
99	24·16	55·7	4·34	24	13·95	54·9	2·54
1900	13·79	61·5	2·24	25	19·51	58·0	3·36
01	28·33	60·4	4·69	26	15·24	57·8	2·64
02	27·37	56·4	4·85	27	22·80	55·5	4·11
03	15·60	56·8	2·75	28	22·13	58·9	3·76
04	25·41	57·3	4·43	29	7·00	56·1	1·25
05	20·15	55·4	3·64	30	15·54	57·1	2·72
06	22·74	58·2	3·91	31	9·60	60·1	1·60
07	19·38	53·3	3·64	32	16·51	60·2	2·74
08	18·28	57·9	3·16				

MINNEDOSA.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1883-84	17·48	56·1	3·11	1909	16·95	58·9	2·88
85	21·51	53·8	4·00	10	12·66	59·1	2·14
86	12·55	58·2	2·16	11	16·62	57·8	2·88
87	16·71	57·9	2·89	12	21·58	58·1	3·73
88	16·33	54·1	3·02	13	16·56	57·8	2·86
89	10·39	57·9	1·79	14	16·20	60·8	2·66
90	17·61	56·7	3·11	15	16·49	55·0	3·00
91	20·01	54·5	3·67	16	19·94	57·5	3·47
92	11·93	54·2	2·20	17	13·64	57·8	2·36
93	14·45	59·4	2·43	18	12·77	56·1	2·28
94	15·76	61·4	2·57	19	16·41	62·3	2·63
95	15·26	57·0	2·68	20	13·99	59·2	2·36
96	20·26	59·7	3·39	21	17·88	61·5	2·91
97	18·12	59·2	3·06	22	22·17	59·9	3·70
98	14·33	58·2	2·46	23	24·38	60·5	4·03
99	19·20	57·2	3·36	24	14·08	55·2	2·55
1900	13·82	61·0	2·27	25	19·06	56·6	3·37
01	25·75	60·7	4·24	26	10·46	58·6	1·78
02	21·22	57·4	3·70	27	25·93	55·4	4·68
03	15·98	58·0	2·81	28	20·03	58·4	3·43
04	23·43	57·8	4·05	29	9·96	56·3	1·77
05	15·57	56·8	2·74	30	14·94	58·5	2·55
06	19·57	58·7	3·33	31	9·85	59·4	1·66
07	17·86	52·9	3·38	32	18·42	60·8	3·03
08	16·54	57·8	2·86				

WINNIPEG.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1872-73	24·64	61·7	3·99	1883	18·79	56·3	3·34
74	17·09	62·9	2·72	84	21·80	60·1	3·63
75	18·22	60·1	3·03	85	25·36	57·8	4·39
76	23·67	60·4	3·92	86	11·66	61·8	1·89
77	30·42	60·6	5·02	87	19·92	62·0	3·21
78	28·31	60·6	4·67	88	16·75	57·5	2·91
79	28·38	60·7	4·68	89	14·66	59·8	2·45
80	22·36	60·7	3·68	90	20·83	59·3	3·51
81	22·01	62·8	3·50	91	21·42	57·8	3·71
82	24·85	57·6	4·31	92	21·44	57·0	3·76

9.—Precipitation in Crop Years and Temperature in the Growing Period at Certain Western Points, together with Quotients when Precipitation is Divided by Temperature, 1883-4-1932—concluded.

NOTE.—Quotients have in all cases been multiplied by 10.

WINNIPEG—concluded.

Year.	P_{12}	T_3	Q	Year.	P_{12}	T_3	Q
1893	25·23	61·0	4·14	1913	17·19	59·8	2·87
94	17·45	63·1	2·77	14	20·97	63·5	3·30
95	20·42	58·7	3·48	15	16·74	57·5	2·91
96	25·41	61·3	4·15	16	24·37	60·0	4·06
97	19·71	60·1	3·28	17	16·68	59·9	2·78
98	18·20	59·7	3·05	18	15·97	58·0	2·75
99	25·91	59·8	4·33	19	23·38	64·9	3·60
1900	15·09	62·8	2·40	20	20·81	61·4	3·39
01	27·78	62·6	4·44	21	21·17	64·1	3·30
02	19·98	60·0	3·33	22	21·13	63·6	3·32
03	15·63	60·4	2·59	23	20·95	64·5	3·25
04	24·00	59·3	4·05	24	12·39	56·4	2·20
05	21·34	58·0	3·68	25	18·11	59·4	3·05
06	21·90	59·8	3·67	26	15·73	61·5	2·56
07	17·17	56·2	3·05	27	23·30	58·5	3·98
08	19·59	60·4	3·24	28	24·83	60·9	4·08
09	20·11	61·1	3·29	29	14·59	59·4	2·46
10	20·53	62·0	3·31	30	21·19	61·7	3·43
11	24·71	61·5	4·02	31	15·73	61·4	2·56
12	21·42	61·1	3·51	32	19·93	63·3	3·15

10.—Weighted Quotients where Precipitation in Crop Year is Divided by Temperature in Growing Period, Expressed as a Percentage of Averages, 1886-1932.

NOTE.—For method of weighting see page 48. Qw has in all cases been multiplied by 100.

Year.	EDMONTON.		CALGARY.		MEDICINE HAT.	
	Q_w	Per cent of Average.	Q_w	Per cent of Average.	Q_w	Per cent of Average.
1886	191	62	–	–	–	–
1887	210	69	219	72	145	70
1888	306	100	282	93	193	93
1889	238	78	262	87	181	87
1890	260	85	250	83	145	70
1891	318	104	229	76	174	84
1892	307	100	186	62	171	82
1893	332	108	183	61	214	103
1894	282	92	188	62	217	105
1895	277	91	231	76	243	117
1896	272	89	252	83	241	116
1897	268	88	302	100	252	122
1898	234	76	328	109	258	125
1899	242	79	342	113	307	148
1900	362	118	379	125	305	147
1901	470	153	415	137	392	189
1902	466	152	513	170	327	158
1903	388	127	426	141	244	118
1904	371	121	392	130	178	86
1905	332	108	332	110	168	81
1906	295	96	386	128	160	77
1907	309	101	264	87	162	78
1908	302	98	318	105	153	74
1909	286	93	321	106	160	77
1910	232	76	234	77	156	75
1911	292	95	273	90	161	78
1912	328	107	326	108	188	91
1913	357	117	382	126	214	103
1914	365	119	306	101	180	87
1915	385	126	339	112	243	117
1916	352	115	314	104	264	128
1917	342	112	253	84	220	106

10.—Weighted Quotients where Precipitation in Crop Year is Divided by Temperature in Growing Period, Expressed as a Percentage of Averages, 1886-1932—continued.

NOTE.—For method of weighting see page 48. Qw has in all cases been multiplied by 100.

Year.	EDMONTON —concluded.		CALGARY —concluded.		MEDICINE HAT —concluded.	
	Q_w	Per cent of Average.	Q_w	Per cent of Average.	Q_w	Per cent of Average.
1918	316	103	197	65	197	95
1919	295	96	174	58	156	75
1920	329	107	249	82	163	79
1921	315	103	240	79	166	80
1922	254	83	218	72	178	86
1923	276	90	310	103	217	105
1924	284	93	324	107	164	79
1925	306	100	341	113	189	91
1926	281	92	319	106	186	89
1927	345	112	476	158	286	138
1928	333	109	464	153	287	139
1929	289	94	343	113	221	107
1930	241	79	273	90	153	74
1931	264	86	238	79	151	73
1932	297	97	302	100	195	94
	BATTLEFORD.		PRINCE ALBERT.		SWIFT CURRENT.	
1888	–	–	234	84	–	–
1889	–	–	210	75	248	96
1890	–	–	241	86	206	80
1891	–	–	236	84	304	118
1892	–	–	250	89	364	141
1893	–	–	203	72	331	129
1894	203	89	193	69	260	101
1895	211	92	190	68	222	86
1896	186	81	274	98	188	73
1897	222	97	274	98	216	84
1898	256	112	291	104	261	102
1899	255	111	350	125	287	112
1900	302	132	401	143	267	104
1901	317	138	429	153	291	132
1902	299	130	393	140	323	126
1903	271	118	333	119	311	121
1904	280	122	331	118	277	108
1905	252	110	248	88	275	107
1906	200	87	316	113	262	102
1907	185	81	327	117	259	101
1908	229	100	357	127	241	94
1909	244	107	347	124	287	112
1910	201	88	272	97	234	91
1911	251	109	236	84	225	88
1912	246	107	276	99	228	89
1913	251	109	305	109	245	95
1914	216	94	293	105	191	74
1915	251	109	257	92	239	93
1916	242	106	314	112	311	121
1917	217	95	246	88	295	115
1918	163	71	236	84	239	92
1919	115	50	200	71	199	77
1920	230	100	256	91	194	75
1921	286	125	344	122	190	74
1922	255	111	335	120	245	95
1923	263	115	294	104	270	105
1924	183	80	223	80	240	93
1925	215	94	254	91	235	91
1926	204	89	243	87	240	93
1927	235	103	287	102	312	121
1928	226	99	279	100	290	113
1929	193	84	246	88	249	97
1930	200	87	247	88	213	82
1931	162	71	245	87	193	75
1932	202	88	297	106	251	98

10.—Weighted Quotients where Precipitation in Crop Year is Divided by Temperature in Growing Period, Expressed as a Percentage of Averages, 1886-1932—concluded.

NOTE.—For method of weighting see page 48. Qw has in all cases been multiplied by 100.

Year.	QU'APPELLE.		MINNEDOSA.		WINNIPEG.	
	Qw	Per cent of Average.	Qw	Per cent of Average.	Qw	Per cent of Average.
1886	217	67	293	100	301	91
1887	206	63	283	97	297	90
1888	256	79	283	97	284	86
1889	230	71	238	81	273	83
1890	291	89	265	90	306	93
1891	347	106	317	108	343	104
1892	334	102	284	97	370	112
1893	319	98	256	87	394	119
1894	240	74	246	85	339	103
1895	259	79	260	89	335	102
1896	297	91	302	103	370	112
1897	285	87	311	106	360	109
1898	262	80	281	96	331	100
1899	340	104	301	103	373	113
1900	298	91	266	91	315	95
1901	381	117	344	117	374	113
1902	436	134	364	124	354	107
1903	377	116	335	114	314	95
1904	394	121	358	122	344	104
1905	375	115	319	109	362	110
1906	391	120	325	111	374	113
1907	373	114	326	111	336	102
1908	344	106	311	106	325	98
1909	377	116	296	101	323	98
1910	374	115	251	85	329	100
1911	363	111	263	90	366	111
1912	362	111	318	109	365	110
1913	361	111	315	107	327	99
1914	393	121	290	99	319	97
1915	342	105	286	98	303	92
1916	366	112	318	109	355	108
1917	372	114	283	97	323	98
1918	344	106	250	85	298	90
1919	308	94	247	84	318	96
1920	295	90	264	90	335	102
1921	348	107	268	91	338	102
1922	379	116	321	110	332	101
1923	451	138	373	127	328	99
1924	361	111	323	110	274	83
1925	337	103	321	110	280	85
1926	286	88	244	83	266	81
1927	349	107	349	119	335	102
1928	369	113	357	122	379	115
1929	256	79	281	96	325	98
1930	240	74	244	83	321	97
1931	191	59	197	67	283	86
1932	236	72	249	85	300	91

11.—Values of Quotients where Precipitation is Divided by Temperature in Growing Period, Related to Sun-spot Maxima.

Year of Maximum.	Years Before.					Sun-spot Max.	Years After.						Place.
	5	4	3	2	1		1	2	3	4	5	6	
Maximum of 1893.........	25	24	17	42	40	26	22	21	16	25	30	29	Swift Current.
	25	14	11	23	15	25	22	26	24	26	26	35	Medicine Hat.
	40	13	30	39	25	36	24	27	28	26	20	26	Edmonton.
	35	22	24	23	14	19	20	27	26	34	34	35	Calgary.
	32	18	35	40	29	32	17	30	34	24	25	43	Qu'Appelle.
	30	18	31	37	22	24	26	27	34	31	25	34	Minnedosa.
Totals.......	**187**	**109**	**148**	**204**	**145**	**162**	**131**	**158**	**162**	**166**	**160**	**202**	
Maximum of 1906.........	33	35	28	25	29	25	26	23	34	17	23	25	Swift Current.
	47	24	17	16	17	15	17	15	17	8	21	21	Medicine Hat.
	53	42	32	39	30	26	34	29	27	19	37	35	Edmonton.
	44	59	41	31	32	26	25	38	30	14	36	37	Calgary.
	47	48	28	44	36	39	36	32	42	36	34	37	Qu'Appelle.
	42	37	28	41	27	33	34	29	29	21	29	37	Minnedosa.
Totals.......	**266**	**245**	**174**	**196**	**171**	**164**	**172**	**166**	**179**	**115**	**180**	**192**	
Maximum of 1917.........	25	25	13	31	37	24	19	19	20	19	30	28	Swift Current.
	21	22	14	32	27	15	20	13	18	17	18	26	Medicine Hat.
	35	36	37	40	31	34	30	28	37	29	19	33	Edmonton.
	37	30	29	39	27	20	17	17	33	21	19	43	Calgary.
	37	36	42	28	40	38	30	29	30	40	39	51	Qu'Appelle.
	37	29	27	30	35	24	23	26	24	29	37	40	Minnedosa.
Totals.......	**192**	**178**	**162**	**200**	**197**	**155**	**139**	**132**	**162**	**155**	**162**	**221**	
Maximum of 1928.........	28	20	25	25	38	25	21	21	18	31	–	–	Swift Current.
	26	10	23	19	37	27	14	12	17	24	–	–	Medicine Hat.
	33	29	31	26	41	30	24	22	30	32	–	–	Edmonton.
	43	30	34	31	63	40	21	27	23	36	–	–	Calgary.
	51	25	34	26	41	38	13	27	16	27	–	–	Qu'Appelle.
	40	26	34	18	47	34	18	26	17	30	–	–	Minnedosa.
Totals.......	**221**	**140**	**181**	**145**	**267**	**194**	**111**	**135**	**121**	**180**	–	–	
Mean Totals[1]....	**216**	**169**	**166**	**187**	**195**	**169**	**138**	**148**	**156**	**154**	**167**	**205**	
General Means[1].	**36**	**28**	**28**	**31**	**33**	**28**	**23**	**25**	**26**	**26**	**28**	**34**	

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[1] These figures are plotted in the diagram shown on p. 52 and indicate that on the average we may expect poorer weather from the agricultural viewpoint in the years immediately following that of maximum sun spots. There is then a sharp rise to be expected at the time of minimum sun spots. This is followed by a drop and then a rise just before sun-spot maximum. The individual figures indicate, however, that this cycle is followed only in a very halting manner. The cyclic averages can not be used to predict the character of an individual year.

CHAPTER II. HISTORY AND CHRONOLOGY.

PART I.—HISTORY.

In the 1922-23 edition of the Canada Year Book, pp. 60-80, will be found an outline of the history of Canada, not reprinted here for lack of space.

A select bibliography of historical works relating to Canada was contributed by the late Adam Shortt, C.M.G., LL.D., F.R.S.C., Chairman of the Historical Documents Publication Board, Ottawa, to the 1925 edition of the Canada Year Book, where it appears on pp. 53-55.

PART II.—CHRONOLOGY, 1497 to 1932.

1497. June 24, Eastern coast of North America discovered by John Cabot.
1498. Cabot discovers Hudson strait.
1501. Gaspar Corte Real visits Newfoundland and Labrador.
1524. Verrazano explores the coast of Nova Scotia.
1534. June 21, Landing of Jacques Cartier at Esquimaux bay.
1535. Cartier's second voyage. He ascends the St. Lawrence to Stadacona (Quebec), (Sept. 14) and Hochelaga (Montreal), (Oct. 2).
1541. Cartier's third voyage.
1542-3. De Roberval and his party winter at cape Rouge, and are rescued by Cartier on his fourth voyage.
1557. Sept. 1, Death of Cartier at St. Malo, France.
1592. Straits of Juan de Fuca discovered by de Fuca.
1603. June 22, Champlain's first landing in Canada, at Quebec.
1605. Founding of Port Royal (Annapolis, N.S.)
1608. Champlain's second visit. July 3, Founding of Quebec.
1609. July, Champlain discovers lake Champlain.
1610-11. Hudson explores Hudson bay and James bay.
1611. Brûlé ascends the Ottawa river.
1612. Oct. 15, Champlain made Lieutenant-General of New France.
1613. June, Champlain ascends the Ottawa river.
1615. Champlain explores lakes Nipissing, Huron and Ontario (discovered by Brûlé and Le Caron).
1616. First schools opened at Three Rivers and Tadoussac.
1620. Population of Quebec, 60 persons.
1621. Code of laws issued and register of births, deaths and marriages opened in Quebec. Nova Scotia granted to Sir William Alexander by King James I.
1622. Lake Superior discovered by Brûlé.
1623. First British settlement of Nova Scotia.
1627. New France and Acadia granted to the Company of 100 Associates.
1628. Port Royal taken by Sir David Kirke.
1629. April 24, Treaty of Susa between France and England. July 20, Quebec taken by Sir David Kirke.
1632. Mar. 29, Canada and Acadia restored to France by the Treaty of St. Germain-en-Laye.
1633. May 23, Champlain made first Governor of New France.
1634. July 4, Founding of Three Rivers.
1634-35. Exploration of the Great Lakes by Nicolet.
1635. Dec. 25, Death of Champlain at Quebec.
1638. June 11, First recorded earthquake in Canada.
1640. Discovery of lake Erie by Chaumonot and Brébeuf.
1641. Resident population of New France, 240.
1642. May 17, Founding of Ville-Marie (Montreal).
1646. Exploration of the Saguenay by Dablon.
1647. Lake St. John discovered by de Quen.
1648. Mar. 5, Council of New France created.
1649. Mar. 16-17, Murder of Fathers Brébeuf and Lalemant by Indians.
1654. Aug., Acadia taken by an expedition from New England.
1655. Nov. 3, Acadia restored to France by the Treaty of Westminster.
1659. June 16, François de Laval arrives in Canada as Vicar-Apostolic.
1660. May 21, Dollard des Ormeaux and sixteen companions killed at the Long Sault, Ottawa river.
1663. Company of 100 Associates dissolved. Feb. 5, Severe earthquake. April, Sovereign Council of New France established. Population in New France, 2,500, of whom 800 were in Quebec.
1664. May, Company of the West Indies founded.
1665. Mar. 23, Talon appointed Intendant.
1666, Feb.-Mar., First census. Population of New France, 3,215.
1667. July 21, Acadia restored to France by the Treaty of Breda. Sept.-Oct., Second census; white population of New France, 3,918.

1668. Mission at Sault Ste. Marie founded by Marquette.

1670. May 13, Charter of the Hudson's Bay Company granted.

1671. Population of Acadia, 441.

1672. Population of New France, 6,705. April 6, Comte de Frontenac, Governor.

1673. June 13, Cataraqui (Kingston) founded.

1674. Oct. 1, Laval becomes first Bishop of Quebec.

1675. Population of New France, 7,832.

1678. Niagara Falls visited by Hennepin.

1679. Ship *Le Griffon* built on Niagara river above the falls by La Salle. Third census; population of New France, 9,400; of Acadia, 515.

1681. Fourth census; population of New France, 9,677.

1682. Frontenac recalled.

1683. Population of New France, 10,251.

1685. First issue of card money. Fifth census, population of New France, 12,263, including 1,538 settled Indians.

1686. Population of New France, 12,373; of Acadia, 885.

1687. Mar. 18, La Salle assassinated.

1688. Sixth census; population of New France, 11,562, including 1,259 settled Indians.

1689. June 7, Frontenac re-appointed Governor. Aug. 5, Massacre of whites by Indians at Lachine.

1690. May 21, Sir William Phips captures Port Royal, but is repulsed in an attack on Quebec (Oct. 16-21).

1692. Seventh census; population of New France, 12,431. Oct. 22, Defence of Verchères against Indians by Madeleine de Verchères.

1693. Population of Acadia, 1,009.

1695. Eighth census; population of New France, 13,639, including 853 settled Indians.

1697. Sept. 20, By the Treaty of Ryswick, places taken during the war were mutually restored. D'Iberville defeats the Hudson's Bay Co.'s ships on Hudson bay.

1698. Nov. 28, Death of Frontenac. Ninth census; population of New France, 15,355.

1701. La Motte Cadillac builds a fort at Detroit.

1703. June 16, Sovereign Council of Canada becomes Superior Council and membership increased from 7 to 12.

1706. Tenth census; population of New France, 16,417.

1709. British invasion of Canada.

1710. Oct. 13, Port Royal taken by Nicholson.

1711. Sept. 1, Part of Sir H. Walker's fleet, proceeding against Quebec, wrecked off the Seven Islands.

1713. April 11, Treaty of Utrecht; Hudson bay, Acadia and Newfoundland ceded to Great Britain. Aug., Louisbourg founded by the French. Population of New France, 18,119.

1719. Census population of New France, 22,530.

1720. Population of New France, 24,234; of Isle St. Jean (P.E.I.), about 100. April 25, Governor and Council of Nova Scotia appointed.

1721. June 19, Burning of about one-half of Montreal. Census population of New France, 24,951.

1727. Population of New France, 30,613.

1728. Population of Isle St. Jean (P.E.I.), 330.

1731. Population of the north of the peninsula of Acadia, 6,000.

1734. Road opened from Quebec to Montreal. Census population of New France, 37,716.

1737. Iron smelted on St. Maurice. French population of the north of the Acadia peninsula, 7,598.

1739. Census population of New France, 42,701.

1743. De la Vérendrye discovers the Rocky mountains.

1745. June 17, Taking of Louisbourg by Pepperell and Warren.

1748. Oct. 18, Treaty of Aix-la-Chapelle. Louisbourg restored to France in exchange for Madras.

1749. June 21, Founding of Halifax—British immigrants brought to Nova Scotia by Governor Cornwallis, 2,544 persons. Fort Rouillé (Toronto) built.

1750. St. Paul's church, Halifax (oldest Anglican church in Canada), built.

1752. Mar. 25, Issue of the Halifax "Gazette", first paper in Canada. British and German population of Nova Scotia, 4,203.

1754. Census population of New France, 55,009.

1755. June 16, Surrender of Fort Beauséjour on the isthmus of Chignecto to the British. Sept. 10, Expulsion of the Acadians from Nova Scotia.

1756. Seven Years' War between Great Britain and France begins.

1758. July 26, Final capture of Louisbourg by the British. Oct. 7, First meeting of the Legislature of Nova Scotia.

1759. July 25, Taking of Fort Niagara by the British. July 26, Beginning of the siege of Quebec. July 31, French victory at Beauport Flats. Sept. 13, Defeat of the French on the Plains of Abraham. Death of Wolfe. Sept. 14, Death of Montcalm. Sept. 18, Surrender of Quebec.

1760. April 28, Victory of the French under Lévis at Ste. Foy. Sept. 8, Surrender of Montreal. Military rule set up in Canada.

1762. British population of Nova Scotia, 8,104. First British settlement in New Brunswick.

1763. Feb. 10, Treaty of Paris, by which Canada and its dependencies are ceded to the British. May, Rising of Indians under Pontiac, who take a number of forts and defeat the British at Bloody Run (July 31). Oct. 7, Civil government proclaimed. Cape Breton and Isle St. Jean annexed to Nova Scotia; Labrador, Anticosti and Magdalen islands to Newfoundland. Nov. 21, General James Murray appointed Governor in Chief. First Canadian post offices established at Montreal, Three Rivers and Quebec.

1764. June 21, First issue of the Quebec "Gazette". Aug. 13, Civil government established.

1765. Publication of the first book printed in Canada, "Catéchisme du Diocèse de Sens". May 18, Montreal nearly destroyed by fire. Population of Canada, 69,810.

1766. July 24, Peace made with Pontiac at Oswego.

1768. Charlottetown, P.E.I., founded. April 11, Great fire at Montreal. April 12, Sir Guy Carleton (Lord Dorchester) Governor in Chief.

1769. Isle St. Jean (Prince Edward Island) separated from Nova Scotia.

1770-72. Hearne's journey to the Coppermine and Slave rivers and Great Slave lake.

1773. Suppression of the order of Jesuits in Canada and escheat of their estates.

1774. June 22, The Quebec Act passed.

1775. May 1, The Quebec Act comes into force. Outbreak of the American Revolution. Montgomery and Arnold invade Canada. Nov. 12, Montgomery takes Montreal; Dec. 31, Is defeated and killed in an attack on Quebec.

1776. The Americans are defeated and driven from Canada by Carleton.

1777. Sept. 18, General Frederick Haldimand Governor in Chief.

1778. Captain Jas. Cook explores Nootka sound and claims the northwest coast of America for Great Britain. June 3, First issue of the Montreal "Gazette".

1783. Sept. 3, Treaty of Versailles, recognizing the independence of the United States. Organization of the Northwest Company at Montreal. Kingston, Ont., and Saint John, N.B., founded by the United Empire Loyalists.

1784. Population of Canada, 113,012. Aug. 16, New Brunswick and (Aug. 26) Cape Breton separated from Nova Scotia.

1785. May 18, Incorporation of Parrtown (Saint John, N.B.).

1786. April 22, Lord Dorchester again Governor in Chief. Oct. 23, Government of New Brunswick moved from Saint John to Fredericton.

1787. C. Inglis appointed Anglican Bishop of Nova Scotia—the first colonial bishopric in the British Empire.

1788. King's College, Windsor, N.S., opened. Sailing packet service established between Great Britain and Halifax.

1789. Quebec and Halifax Agricultural Societies established.

1790. Spain surrenders her exclusive rights on the Pacific coast. Population of Canada, 161,311. (This census does not include what becomes in the next year Upper Canada).

1791. The Constitutional Act divides the province of Quebec into Upper and Lower Canada, each with a lieutenant-governor and legislature. The Act goes into force Dec. 26. Sept. 12, Colonel J. G. Simcoe, first Lieutenant-Governor of Upper Canada.

1792. Sept. 17, First Legislature of Upper Canada opened at Newark (Niagara). Dec. 17, First Legislature of Lower Canada opened at Quebec. Vancouver island circumnavigated by Vancouver.

1793. April 18, First issue of the "Upper Canada Gazette". June 28, Jacob Mountain appointed first Anglican Bishop of Quebec. July 9, Importation of slaves into Upper Canada forbidden. Rocky mountains crossed by (Sir) Alexander Mackenzie, who reaches the Pacific ocean. York (Toronto) founded by Simcoe.

1794. Nov. 19, Jay's Treaty between Great Britain and the United States.

1795. Pacific coast of Canada finally given up by the Spaniards.

1796. Government of Upper Canada moved from Niagara to York (Toronto).

1798. St. John's island (Isle St. Jean, population 4,500) re-named Prince Edward island.

1800. Founding of New Brunswick College, Fredericton (now University of N.B.). The Rocky mountains crossed by David Thompson.

1803. Settlers sent by Lord Selkirk to Prince Edward island.

1806. Nov. 22, Issue of "Le Canadien"—first wholly French newspaper. Population—Upper Canada, 70,718; Lower Canada, 250,000; New Brunswick, 35,000; P.E.I., 9,676.

1807. Simon Fraser explores the Fraser river. Estimated population of Nova Scotia, 65,000.

1809. Nov. 4, First Canadian steamer runs from Montreal to Quebec.

1811. Lord Selkirk's Red River settlement founded on land granted by Hudson's Bay Company.

1812. June 18, Declaration of war by the United States. July 12, Americans under Hull cross the Detroit river. Aug. 16, Detroit surrendered by Hull to Brock. Oct. 13, Defeat of the Americans at Queenston Heights and death of Gen. Brock.

1813. Jan. 22, British victory at Frenchtown. April 27, York (Toronto) taken and burned by the Americans. June 5, British victory at Stoney Creek. June 24, British, warned by Laura Secord, capture an American force at Beaver Dams. Sept. 10, Commodore Perry destroys the British flotilla on lake Erie. Oct. 5, Americans under Harrison defeat the British at Moraviantown. Tecumseh killed. Oct. 26, Victory of French-Canadian troops under de Salaberry at Chateauguay. Nov. 11, Defeat of the Americans at Crysler's Farm. British storm Fort Niagara and burn Buffalo.

1814. Mar. 30, Americans repulsed at La Colle. May 6, Capture of Oswego by the British. July 5, American victory at Chippawa. July 25, British victory at Lundy's Lane. July, British from Nova Scotia invade and occupy northern Maine. Sept. 11, British defeat at Plattsburg on lake Champlain. Dec. 24, Treaty of Ghent ends the war. Population—Upper Canada, 95,000; Lower Canada, 335,000.

1815. July 3, Treaty of London regulates trade with the United States. The Red River settlement destroyed by the Northwest Company but restored by Governor Semple.

1816. June 19, Governor Semple killed. The Red River settlement again destroyed.

1817. July 18, First treaty with the Northwest Indians. Lord Selkirk restores the Red River settlement. Opening of the Bank of Montreal; first note issued Oct. 1. Population of Nova Scotia, 81,351. Rush-Bagot Convention with the United States, limiting naval armament on the Great Lakes, is signed.

1818. Oct. 20, Convention at London regulating North American fisheries. Dalhousie College, Halifax, founded. Bank of Quebec founded.

1819-22. Franklin's overland Arctic expedition.

1820. Oct. 16, Cape Breton re-annexed to Nova Scotia.

1821. Mar. 26, The Northwest Company absorbed by the Hudson's Bay Company. Charter given to McGill College.

1822. Population of Lower Canada, 427,465.

1824. Population of Upper Canada, 150,066; of New Brunswick, 74,176.

1825. Oct. 6, Great fire in the Miramichi district, N.B. Opening of the Lachine canal. Population of Lower Canada, 479,288.

1826. Founding of Bytown (Ottawa).

1827. Sept. 29, Convention of London relating to the territory west of the Rocky mountains. Population of Nova Scotia, including Cape Breton, 123,630.

1828. The Methodist Church of Upper Canada separated from that of the United States.

1829. Nov. 27, First Welland canal opened. McGill University opened. Upper Canada College founded.

1831. June 1, The North Magnetic Pole discovered by (Sir) James Ross. Population—Upper Canada, 236,702; Lower Canada, 553,131; Assiniboia, 2,390.

1832. Outbreak of cholera in Canada. Incorporation of Quebec and Montreal. Bank of Nova Scotia founded. May 30, Opening of the Rideau canal.

1833. Aug. 18, The steamer *Royal William*, built at Quebec, crosses the Atlantic from Pictou to England.

1834. Feb. 21, The Ninety-two Resolutions on public grievances passed by the Assembly of Lower Canada. Mar. 6, Incorporation of Toronto. Population of Upper Canada, 321,145; of New Brunswick, 119,457; of Assiniboia, 3,356.

1836. July 21, Opening of the first railway in Canada from Laprairie to St. John's, Que. Victoria University opened at Cobourg (afterwards moved to Toronto).

1837. Report of the Canada Commissioners. Rebellion in Lower Canada (Papineau) and Upper Canada (W. L. Mackenzie). Nov. 23, Gas lighting first used in Montreal.

1838. Feb. 10, Constitution of Lower Canada suspended and Special Council created. Mar. 30, The Earl of Durham Governor in Chief. April 27, Martial law revoked. June 28, Amnesty to political prisoners proclaimed. Nov. 1, Lord Durham, censured by British Parliament, resigns. Population—Upper Canada, 339,442; Assiniboia, 3,966; Nova Scotia, 202,575.

1839. Feb. 11, Lord Durham's report submitted to Parliament. John Strachan ordained first Anglican Bishop of Toronto.

1840. July 23, Passing of the Act of Union, First ship of the Cunard line arrives at Halifax. July 28, Death of Lord Durham.

1841. Feb. 10, Union of the two provinces as the province of Canada, with Kingston as capital. Feb. 13, Draper-Ogden administration. April 10, Halifax incorporated. June 13, Meeting of the first United Parliament. Sept. 19, Death of Lord Sydenham. Population of Upper Canada, 455,668; of P.E.I., 47,042.

1842. Mar. 10, Opening of Queen's University, Kingston. Aug. 9, The Ashburton Treaty. Sept. 16, Baldwin-Lafontaine administration.

1843. June 4, Victoria, B.C., founded. Dec. 12, Draper-Viger administration. King's (now University) College, Toronto, opened.

1844. May 10, Capital moved from Kingston to Montreal. Knox College, Toronto, founded. Population of Lower Canada, 697,084.

1845. May 28 and June 28, Great fires at Quebec. Franklin starts on his last Arctic expedition.

1846. May 18, Kingston incorporated. June 15, Oregon Boundary Treaty. June 18, Draper-Papineau administration. First telegraph line, operated by the Toronto, Hamilton, Niagara and St. Catharines Telegraph Co., opened.

1847. May 29, Sherwood-Papineau administration. Nov. 25, Montreal-Lachine Railway opened.

1848. Mar. 11, Lafontaine-Baldwin administration. May 30, Fredericton incorporated. Responsible government granted to Nova Scotia and New Brunswick.

1849. April 25, Signing of the Rebellion Losses Act; rioting in Montreal and burning of the Parliament buildings. Nov. 14, Toronto made the capital. Vancouver island granted to the Hudson's Bay Company. Population of Assiniboia, 5,391.

1851. April 6, Transfer of the postal system from the British to the Provincial Government; uniform rate of postage introduced. April 23, Postage stamps issued. Aug. 2, Incorporation of Trinity College, Toronto. Sept. 22, Quebec becomes the capital. Oct. 28, Hincks-Morin administration. Responsible government granted to Prince Edward Island. Population—Upper Canada, 952,004; Lower Canada, 890,261; New Brunswick, 193,800; Nova Scotia, 276,854.

1852. July 8, Great fire at Montreal. Dec. 8, Laval University, Quebec, opened. The Grand Trunk Railway chartered.

1854. June 5, Reciprocity Treaty with the United States. Sept. 11, MacNab-Morin Ministry. Seigneurial tenure in Lower Canada abolished. Secularization of the clergy reserves.

1855. Jan. 1, Incorporation of Ottawa. Jan. 27, MacNab-Taché administration. Mar. 9, Opening of the Niagara Railway suspension bridge. April 17, Incorporation of Charlottetown. Oct. 20, Government moved to Toronto.

1856. The Legislative Council of Canada is made elective. First meeting of the Legislature of Vancouver island. May 24, Taché-J. A. Macdonald administration. Oct. 27, Opening of the Grand Trunk Railway from Montreal to Toronto. Population of Assiniboia, 6,691.

1857. Nov. 26, J. A. Macdonald-Cartier administration. Dec. 31, Ottawa chosen by Queen Victoria as future capital of Canada.

1858. Feb., Discovery of gold in Fraser River valley. July 1, Introduction of Canadian decimal currency. Aug. 2, Brown-Dorion administration. Aug. 5, Completion of the Atlantic cable; first message sent. Aug. 6, Cartier-J. A. Macdonald administration. Aug. 20, Colony of British Columbia established. Control of Vancouver island surrendered by the Hudson's Bay Company.

1859. Jan., Canadian silver coinage issued. Sept. 24, Government moved to Quebec.

1860. Aug. 8, The Prince of Wales (King Edward VII) arrives at Quebec. Sept. 1, Laying of the corner stone of the Parliament buildings at Ottawa by the Prince of Wales. Prince of Wales College, Charlottetown, founded.

1861. Aug. 14, Great flood at Montreal. Sept. 10, Meeting of the first Anglican provincial synod. Population—Upper Canada, 1,396,091; Lower Canada, 1,111,566; New Brunswick, 252,047; Nova Scotia, 330,857; Prince Edward Island, 80,857.

1862. May 24, Sandfield Macdonald-Sicotte administration. Aug. 2, Victoria, B.C., incorporated.

1863. May 16, Sandfield Macdonald-Dorion administration.

1864. Mar. 30, Taché-J. A. Macdonald administration. Conferences on confederation of British North America; Sept. 1, at Charlottetown; Oct. 10-29, at Quebec. Oct. 19, Raid of American Confederates from Canada on St. Albans, Vermont.

1865. Feb. 3, The Canadian Legislature resolves on an address to the Queen praying for union of the provinces of British North America. Aug. 7, Belleau-J.A. Macdonald administration. Oct. 20, Proclamation fixing the seat of government at Ottawa.

1866. Mar. 17, Termination of the Reciprocity Treaty by the United States. May 31, Raid of Fenians from the United States into Canada; they are defeated at Ridgeway (June 2) and retreat across the border (June 3). June 8, First meeting at Ottawa of the Canadian Legislature. Nov. 17, Proclamation of the union of Vancouver island with British Columbia.

1867. Mar. 29, Royal assent given to the British North America Act. July 1, The Act comes into force; Union of the provinces of Canada, Nova Scotia and New Brunswick as the Dominion of Canada; Upper and Lower Canada made separate provinces as Ontario and Quebec; Viscount Monck first Governor General, Sir John A. Macdonald, Premier. Nov. 6, Meeting of the first Dominion Parliament.

1868. April 7, Murder of D'Arcy McGee at Ottawa. July 31, The Rupert's Land Act authorizes the acquisition by the Dominion of the Northwest Territories.

1869. June 22, Act providing for the government of the Northwest Territories. Nov. 19, Deed of surrender to the Crown of the Hudson's Bay Company's territorial rights in the Northwest. Outbreak of the Red River Rebellion under Riel.

1870. May 12, Act to establish the province of Manitoba. July 15, Northwest Territories transferred to the Dominion and Manitoba admitted into Confederation. Sept. 24, Wolseley's expedition reaches Fort Garry (Winnipeg); end of the rebellion.

1871. April 2, First Dominion census (populations at this and succeeding enumerations given on p. 102). April 14, Act establishing uniform currency in the Dominion. May 8, Treaty of Washington, dealing with questions outstanding between the United Kingdom and the United States. July 20, British Columbia enters Confederation.

1873. Mar. 5, Opening of the second Dominion Parliament. May 23, Act establishing the Northwest Mounted Police. July 1, Prince Edward Island enters Confederation. Nov. 7, Alexander Mackenzie becomes Prime Minister. Nov. 8, Incorporation of Winnipeg.

1874. Mar. 26, Opening of the third Dominion Parliament. May, Ontario Agricultural College, Guelph, opened.

1875. April 8, The Northwest Territories Act establishes a Lieutenant-Governor and Council of the Northwest Territories. April-May, Letting of first contract and commencement of work upon the Canadian Pacific Railway as a Government line. Work commenced at Fort William. June 15, Formation of the Presbyterian Church of Canada.

1876. June 1, Opening of the Royal Military College, Kingston. June 5, First sitting of the Supreme Court of Canada. July 3, Opening of the Intercolonial Railway from Quebec to Halifax.

1877. June 20, Great fire at Saint John, N.B. Oct., First exportation of wheat from Manitoba to the United Kingdom. Founding of the University of Manitoba.

1878. July 1, Canada joins the International Postal Union. Oct. 17, Sir John A. Macdonald becomes Prime Minister.

1879. Feb. 13, Opening of the fourth Dominion Parliament. May 15. Adoption of a protective tariff ("The National Policy").

1880. Royal Canadian Academy of Arts founded; first meeting and exhibition, Mar. 6. May 11, Sir A. T. Galt appointed first Canadian High Commissioner in London. Sept. 1, All British possessions in North America and adjacent islands, except Newfoundland and its dependencies, annexed to Canada by Imperial Order in Council of July 31. Oct. 21, Signing of the contract with the present Canadian Pacific Railway Co. for the completion of the Canadian Pacific Railway.

1881. April 4, Second Dominion census. May 2, First sod of the Canadian Pacific Railway as a company line turned.

1882. May 8, Provisional districts of Assiniboia, Saskatchewan, Athabaska and Alberta formed. May 25, First meeting of the Royal Society of Canada. Aug. 23, Regina established as seat of government of Northwest Territories.

1883. Feb. 1, Opening of the fifth Dominion Parliament. Sept. 5, Formation of the Methodist Church in Canada; united conference.

1884. May 24, Sir Charles Tupper High Commissioner in London. Aug. 11, Order in Council settling the boundary of Ontario and Manitoba.

1885. Mar. 26, Outbreak of Riel's second rebellion in the Northwest. April 24, Engagement at Fish Creek. May 2, Engagement at Cut Knife. May 12, Taking of Batoche. May 16, Surrender of Riel. Aug. 24, First census of the Northwest Territories. Nov. 16, Execution of Riel.

1886. April 6, Incorporation of Vancouver. June 7, Archbishop Taschereau of Quebec made first Canadian Cardinal. June 13, Vancouver destroyed by fire. June 28, First through train of the Canadian Pacific Railway from Montreal to Vancouver. July 31, First quinquennial census of Manitoba.

1887. Interprovincial Conference at Quebec. April 4, First Colonial Conference in London. April 13, Opening of the sixth Dominion Parliament.

1888. Feb. 15, Signing of Fishery Treaty between United Kingdom and United States at Washington. Aug., Rejection of Fishery Treaty by United States' Senate.

1890. Mar. 31, The Manitoba School Act abolishes separate schools.

1891. April 5, Third Dominion census. April 29, Opening of the seventh Dominion Parliament. June 6, Death of Sir John A. Macdonald. June 15, Sir John Abbott becomes Prime Minister.

1892. Feb. 29, Washington Treaty, providing for arbitration of the Behring Sea Seal Fisheries question. July 22, Boundary convention between Canada and United States. Nov. 25, Sir John Thompson becomes Prime Minister.

1893. April 4, First sitting of the Behring Sea Arbitration Court. Dec. 18, Archbishop Machray, of Rupert's Land, elected first Anglican Primate of all Canada.

1894. June 28, Second Colonial Conference at Ottawa. Dec. 12, Death of Sir John Thompson at Windsor Castle. Dec. 21, (Sir) Mackenzie Bowell becomes Prime Minister.

1895. Sept. 10, Opening of new Sault Ste. Marie canal. Oct. 2, Proclamation naming the Ungava, Franklin, Mackenzie and Yukon districts of Northwest Territories.

1896. April 24, Sir Donald Smith (Lord Strathcona) High Commissioner in London. April 27, Sir Charles Tupper becomes Prime Minister. July 11 (Sir) Wilfrid Laurier becomes Prime Minister. Aug., Gold discovered in the Klondyke. Aug. 19, Opening of the eighth Dominion Parliament.

1897. July, Third Colonial Conference in London. Dec. 17, Award of the Behring Sea Arbitration Court.

1898. June 13, The Yukon district established as a separate territory. Aug. 1, The British Preferential Tariff goes into force. Aug. 23, Meeting at Quebec of the Joint High Commission between Canada and the United States. Dec. 25, British Imperial penny (2 cent) postage introduced.

1899. Oct. 1, Mgr. Diomède Falconio arrived at Quebec as first permanent Apostolic Delegate to Canada. Oct. 11, Beginning of the South African War. Oct. 29, First Canadian contingent leaves Quebec for South Africa.

1900. Feb. 27, Battle of Paardeberg. April 26, Great fire at Ottawa and Hull.

1901. Jan. 22, Death of Queen Victoria and accession of King Edward VII. Feb. 6, Opening of the ninth Dominion Parliament. April 1. Fourth Dominion census. Sept. 16-Oct. 21, Visit to Canada of the Duke and Duchess of Cornwall and York (King George V and Queen Mary).

1902. May 31, End of South African War; peace signed at Vereeniging. June 30, Meeting of fourth Colonial Conference in London.

1903. Jan. 24, Signing of the Alaskan Boundary Convention. June 19, Incorporation of Regina. Oct. 20, Award of the Alaskan Boundary Commission.

1904. Feb. 1, Dominion Railway Commission established. April 19, Great fire in Toronto. Oct. 8, Incorporation of Edmonton.

1905. Jan. 11, Opening of the tenth Dominion Parliament. Sept. 1, Creation of the provinces of Alberta and Saskatchewan.

1906. University of Alberta founded. Oct. 8, Interprovincial Conference at Ottawa.

1907. April 15-May 14, Fifth Colonial Conference in London. New customs tariff, including introduction of intermediate tariff. Sept. 19, New commercial convention with France signed at Paris. Oct. 17, First message by wireless telegraphy between Canada and the United Kingdom. University of Saskatchewan founded.

1908. Jan. 2, Establishment of Ottawa branch of Royal Mint. June 21-23, Bicentenary of Bishop Laval celebrated at Quebec. July 20-31, Quebec tercentenary celebrations; visit of Prince of Wales to Quebec. Aug. 2, Great fire in Kootenay Valley, B.C. University of British Columbia founded.

1909. Jan. 11, Signing of International Boundary Waters Convention between Canada and United States. Jan. 20, Opening of 11th Dominion Parliament. July 28, Conference on Imperial defence in London.

1910. May 6, Death of King Edward VII and accession of King George V. June 7, Death of Goldwin Smith. Sept. 7, North Atlantic Coast Fisheries Arbitration Award of the Hague Tribunal. New trade agreements made with Germany, Belgium, Holland and Italy.

1911. May 23-June 20, Imperial Conference in London. June 1, Fifth Dominion census. July 11, Disastrous fires in Porcupine district. Sept. 21, General election. Oct. 10, (Sir) R. L. Borden, Prime Minister. Oct. 11, Inauguration at Kitchener of Ontario hydro-electric power transmission system. Nov. 15, Opening of twelfth Dominion Parliament.

1912. April 15, Loss of the steamship *Titanic;* Appointment of Dominions Royal Commission. May 15, Extension of the boundaries of Quebec, Ontario and Manitoba.

1913. April 10, Japanese Treaty Act assented to. June 2, Trade agreement with West Indies came into force.

1914. May 20, Loss of the steamship *Empress of Ireland*. Aug. 4, War with Germany; Aug. 12, with Austria-Hungary; Nov. 5, with Turkey. Aug. 18-22, Special war session of Canadian Parliament. Oct. 16, First Canadian contingent of over 33,000 troops lands at Plymouth, Eng.

1915. Feb., First Canadian contingent lands in France and proceeds to Flanders. April 22, Second Battle of Ypres. April 24, Battle of St. Julien. May 20-26, Battle of Festubert. June 15, Battle of Givenchy.

1916. Jan. 12, Order in Council authorizing increase in number of Canadian troops to 500,000. Feb. 3, Destruction of the Houses of Parliament at Ottawa by fire. April 3-20, Battle of St. Eloi. June 1, Census of Prairie Provinces. June 1-3, Battle of Sanctuary Wood. July 1, Commencement of the Battle of the Somme. Sept. 1, Cornerstone of new Houses of Parliament laid by Duke of Connaught.

1917. Feb. 12-May 15, Imperial Conference. Mar. 20-May 2, Meetings in London of Imperial War Cabinet. Mar. 21-April 27, Imperial War Conference. April 6, United States declares war against Germany. April 9, Capture of Vimy Ridge. June 21, Appointment of Food Controller. Aug. 15, Battle of Loos, capture of Hill 70. Aug. 29, Passing of Military Service Act. Sept. 20, Completion of Quebec bridge; Parliamentary franchise extended to women. Oct. 26-Nov. 10, Battle of Passchendaele. Dec. 6, Disastrous explosion at Halifax, N.S. Dec. 17, General election and Union Government sustained.

1918. Mar. 18, Opening of first session of thirteenth Parliament. Mar. 31, Germans launch critical offensive on West Front. March-April, Second Battle of the Somme. April 17, Secret session of Parliament. June-July, Prime Minister and colleagues attend Imperial War Conference in London. July 18, Allies assume successful offensive on West Front. Aug. 12, Battle of Amiens. Aug. 26-28, Capture of Monchy le Preux. Sept. 2-4, Breaking of Drocourt-Quéant line. Sept. 16, Austrian peace note. Sept. 27-29, Capture of Bourlon Wood. Sept. 30, Bulgaria surrenders and signs armistice. Oct., Serious influenza epidemic. Oct. 1-9, Capture of Cambrai. Oct. 6, First German peace note. Oct. 20, Capture of Denain. Oct. 25-Nov. 2, Capture of Valenciennes. Oct. 31, Turkey surrenders and signs armistice. Nov. 4, Austria-Hungary surrenders and signs armistice. Nov. 11, Capture of Mons. Germany surrenders and signs armistice.

1919. Feb. 17, Death of Sir Wilfrid Laurier. Feb. 20-July 7, Second session of thirteenth Parliament. May 1-June 15, General strike at Winnipeg and other western cities. June 28, Signing at Versailles of Peace Treaty and Protocol. Aug. 15, Arrival of the Prince of Wales for official tour in Canada. Aug. 22, Formal opening of Quebec bridge by the Prince of Wales. Sept. 1, The Prince of Wales lays foundation stone of tower of new Parliament Buildings at Ottawa. Sept. 1-Nov. 10, Third or special peace session, thirteenth Parliament of Canada. Dec. 20, Organization of "Canadian National Railways" by Order in Council.

1920. Jan. 10, Ratifications of the Treaty of Versailles. Feb. 19, Shareholders ratify agreement for sale of the Grand Trunk Railway to the Dominion Government. Feb. 26-July 1, Fourth session of the thirteenth Parliament of Canada. May 31-June 18, Trade Conference at Ottawa between Dominion and West Indian Governments. July 10, Sir Robert Borden is succeeded by Rt. Hon. Arthur Meighen as Prime Minister. July 16, Ratifications of the Treaty of St. Germain-en-Laye. Aug. 9, Ratifications of the Treaty of Neuilly-sur-Seine. Nov. 15, First meeting of League of Nations Assembly begins at Geneva, Switzerland.

1921. Feb. 14-June 4, Fifth session of thirteenth Parliament of Canada. May 10, Preferential tariff arrangement with British West Indies becomes effective. June 1, Sixth Dominion census. June 20-Aug. 5, Imperial Conference. Sept. 5-Oct. 5, Second meeting of Assembly of League of Nations at Geneva. Nov. 11, Opening of conference on limitation of armament at Washington. Dec. 6, Dominion general election. Dec. 29, New Ministry (Liberal), with Right Hon. W. L. Mackenzie King as Prime Minister, is sworn in.

1922. Feb. 1, Arms Conference at Washington approves 5-power treaty, limiting capital fighting ships and disapproving unrestricted submarine warfare and use of poison gas. Mar. 8-June 28, First session of fourteenth Parliament of Canada. April 10, General Economic Conference opened at Genoa. July 13, Conference between Canada and the United States *re* perpetuating the Rush-Bagot treaty regarding armament on the Great Lakes. Aug. 7, Allies' Conference on war debts and reparations opened at London. Sept. 4, Third Assembly of League of Nations opened at Geneva. Oct. 10, Mudania Armistice signed by Britain, France and Turkey. Oct. 14, Fourth International Labour Conference at Geneva. Nov. 20, Turkish Peace Conference opened at Lausanne. Dec. 9, Reparations Conference opened at London. Dec. 15, Signing of trade agreement between Canada and France.

1923. Jan. 4, Signing of trade agreement between Canada and Italy. Jan. 31-June 30, Second session of fourteenth Parliament of Canada. April 1, Removal of British embargo on Canadian cattle effective. Sept. 3, Fourth session of League of Nations at Geneva. Oct. 1, Imperial Conference and Economic Conference at London.

1924. Feb. 28-July 19. Third session of the fourteenth Parliament of Canada. April 23, British Empire Exhibition opened by King George at Wembley, England, with the Prince of Wales as President. July 3, Trade agreement between Canada and Belgium signed at Ottawa. Aug. 6-16, Meeting of the British Association for the Advancement of Science at Toronto. Aug. 11-16, Meeting of International Mathematical Congress at Toronto. Sept. 1, Opening of fifth session of League of Nations at Geneva, Switzerland.

1925. Feb. 5-June 27, Fourth session of fourteenth Parliament of Canada. June 2, Provincial general election in Saskatchewan. Liberal party under Hon. C. A. Dunning returned to office. June 10, Inauguration of the United Church of Canada. June 25, Provincial general election in Nova Scotia; Conservative party under Hon. E. N. Rhodes returned to office. July 6, Signing at Ottawa of trade agreement between Canada and the British West Indies. Aug. 10, Provincial general election in New Brunswick; Conservative party under Hon. J. B. M. Baxter returned to office. Sept. 5, Fourteenth Parliament dissolved. Oct. 29, Dominion general elections. Nov. 20, Death of Queen Alexandra.

1926. Jan. 7-July 1, First session of fifteenth Parliament of Canada. April 15, Budget speech; reductions of income and other taxes announced. June 28, Resignation of Rt. Hon. W. L. Mackenzie King, Prime Minister, and his Cabinet. Provincial general elections in Alberta; United Farmers under Premier Brownlee retain office. June 29, Rt. Hon. Arthur Meighen becomes Prime Minister. July 1, Two-cent domestic rate of postage restored. July 2, Fifteenth Parliament dissolved. July 13, Composition of Mr. Meighen's Cabinet announced (see p. 77 of the 1927-28 Year Book). Sept. 14, Dominion general elections. Sept. 25, Rt. Hon. W. L. Mackenzie King becomes Prime Minister (for composition of Cabinet see p. 69 of Canada Year Book, 1930). Oct. 19-Nov. 23, Imperial Conference in London. Nov. 26, Hon. C. Vincent Massey is appointed Envoy Extraordinary and Minister Plenipotentiary to the United States. Dec. 1, General election in Ontario; Ferguson Government retains office. Dec. 9, Opening of first session of sixteenth Parliament.

1927. Feb. 8-April 14, Continuation of first session of the sixteenth Parliament of Canada. Feb. 17, Budget speech; reductions of income tax, sales tax and stamp tax on cheques announced. May 16, General elections in Quebec; the Liberal Government of Hon. L. A. Taschereau sustained. June 1, Hon. Wm. Phillips, first U.S. Minister to Canada, reaches Ottawa. June 25, General election in Prince Edward Island; the Conservative Government of Hon. J. D. Stewart defeated. June 28, General election in Manitoba; the Government of Hon. John Bracken sustained. July 1-3, Diamond Jubilee of Confederation celebrated throughout the Dominion. July 30, The Prince of Wales, Prince George, the Rt. Hon. Stanley Baldwin and party, arrive at Quebec on a visit to Canada. Sept., Canada elected as a non-permanent member of the Council of the League of Nations at Geneva. Nov., Dominion-Provincial Conference on the relations between the Dominion and the provinces.

1928. Jan. 26-June 11, Second session of the sixteenth Parliament of Canada. Jan. 30, President Cosgrove of the Irish Free State visits Ottawa. Feb. 16, Budget speech announces reduction in taxation. April 25, Sir Wm. H. Clark appointed first British High Commissioner to Canada. May 31, Legislative Council of Nova Scotia ceases to exist, leaving Quebec as the only province with a bi-cameral Legislature. July 18, General elections in British Columbia; Conservatives successful. Aug. 24-Oct. 5, Empire Parliamentary Association visits Canada. Oct. 1, General elections in Nova Scotia; Conservatives retain power.

1929. Feb. 7-June 14, Third session of the sixteenth Parliament of Canada. Mar. 29, Death of Sir Lomer Gouin. June 5, General election in Saskatchewan. Sept. 9, Dr. J. T. M. Anderson becomes Premier of Saskatchewan. Oct. 15-25, The Rt. Hon. J. Ramsay Macdonald, Prime Minister of Great Britain, visits Canada. Oct. 30, General elections in Ontario; Conservatives retain power. Nov. 11, Death of Hon. Jas. A. Robb, Minister of Finance. Dec. 14, Transfer of natural resources to Manitoba and Alberta.

1930. Jan. 21, Five power naval arms conference opens at London: Canada represented by Hon. J. L. Ralston. Feb. 3, Death of Hon. P. C. Larkin. Feb. 20, Fourth session of the sixteenth Parliament of Canada commences. Transfer of natural resources to British Columbia. Mar.

20, Transfer of natural resources to Saskatchewan. May 30. Dissolution of sixteenth Parliament of Canada. June 19, General elections in Alberta; United Farmers retain power. June 20, General election in New Brunswick; Conservatives retain power. July 28, Dominion general election. Liberal Government of Rt. Hon. W. L. Mackenzie King defeated. Aug. 1, H.M. Airship R-100 arrives at Montreal, being the first transatlantic lighter-than-air craft to reach Canada. Aug. 7, Conservative Government of Hon. R. B. Bennett takes office as the fifteenth Ministry since Confederation (for the names of the Ministers see p. 73). Sept. 8-22, First (special) session of the seventeenth Parliament of Canada. Oct. 1, Imperial Conference in London. Dec. 20, Viscount Willingdon, Governor General of Canada, is appointed Viceroy of India by the King.

1931. Feb. 9, The Earl of Bessborough is appointed Governor General of Canada. Mar. 12-Aug. 3, Second session of the seventeenth Parliament of Canada. June 11, Remembrance Day (Nov. 11) proclaimed a general holiday by Act of Parliament. June 22, The U.S. Government grants a one-year moratorium on war debts owing by foreign governments on condition that similar treatment is accorded to Germany in regard to reparation payments. June 30, The Statute of Westminster exempting the Dominion and the provinces from the operation of the Colonial Laws Validity Act and the Merchant Shipping Act is approved by the House of Commons. Aug. 6. Provincial election in Prince Edward Island results in defeat of the Liberal Administration of Hon. D. M. Lea by the Conservatives under Hon. J. D. Stewart. Aug. 24, Hon. L. A. Taschereau's Liberal Administration is sustained in a general election in Quebec. Sept. 21, Great Britain suspends specie payments, following which Canada restricts the export of gold. Nov. 21, Abnormal Importations Act, extending preference to Empire products, assented to in the United Kingdom. Dec. 1, Ottawa Branch of the Royal Mint transferred to the Dominion. Dec. 12, Statute of Westminster establishing complete legislative equality of the Parliament of Canada with that of the United Kingdom becomes effective.

1932. Feb. 4-May 26, Third session of the seventeenth Parliament of Canada. June 16, General election in Manitoba; the Bracken Government retains power. July 18, Treaty between Canada and the United States, providing for the construction of the St. Lawrence seaway, signed at Washington. July 21-Aug. 20, Imperial Economic Conference at Ottawa. Aug. 6, Official opening of the Welland Ship Canal. Oct. 6, Fourth session of the seventeenth Parliament of Canada begins. Dec. 15, The one-year moratorium on war debts granted by the United States in 1931, not having been extended, debt payments were conditionally resumed by the United Kingdom following a diplomatic exchange of notes. (For further details regarding principal events of 1932 see Chapter XXX.)

CHAPTER III.—CONSTITUTION AND GOVERNMENT.

The Dominion of Canada is the largest in area and the most populous of the great self-governing Dominions of the British Empire, which also include the Irish Free State (Saorstat Eireann), the Commonwealth of Australia, the Union of South Africa, the Dominion of New Zealand, the island colony of Newfoundland (with the Labrador coast), and the colony of Southern Rhodesia. These Dominions enjoy responsible government of the British type, administered by Executive Councils (or Cabinets), acting as advisors to the representatives of the Sovereign, the Executive Councils being themselves responsible to, and possessing the confidence of, the representatives elected to Parliament by the people, and giving place to other persons more acceptable to Parliament whenever that confidence is shown to have ceased to exist. The Imperial Conference of 1926 defined the group of self-governing communities consisting of Great Britain and the Dominions as "autonomous Communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or foreign affairs, though united by a common allegiance to the Crown, and freely associated as members of the British Commonwealth of Nations". The Conference further laid down that, as a consequence of this equality of status, the Governor General of a Dominion "is the representative of the Crown, holding in all essential respects the same position in relation to the administration of public affairs in the Dominion as is held by His Majesty the King in Great Britain", and that "it is the right of the Government of each Dominion to advise the Crown in all matters relating to its own affairs". The Conference also recognized certain treaty-making rights as appertaining to the Dominion. At the Imperial Conference of 1930 the constitutional status of the Dominions was further strengthened by the decisions to repeal the Colonial Laws Validity Act and to establish a voluntary Empire judicial tribunal. It was also definitely laid down that the King appoints his Governors General through the Dominion Governments. An Address of the Parliament of Canada to His Majesty was adopted by the House of Commons on June 30, and by the Senate on July 6, 1931, praying for the enactment by the Parliament of the United Kingdom of the Statute of Westminster removing the remaining legal limitations under the Colonial Laws Validity Act of 1895, the Merchant Shipping Act of 1894 and the Colonial Courts of Admiralty Act of 1890 on the legislative autonomy of the Dominions. In compliance with this Address and similar Addresses from the Parliaments of other Dominions, the Parliament of the United Kingdom having enacted legislation to this effect, the Royal Assent was given thereto on Dec. 12, 1931.

Of the Dominions, Canada, Australia and South Africa extend over enormous areas of territory, each of the first two approximating in area to Europe, and including great provinces or states larger than most of its great Powers. Each province or state has its own problems and its own point of view, so that local Parliaments for each section, as well as the central Parliament for the whole country, are required. These local Parliaments, established when transportation and communication were more difficult and expensive than at present, were chronologically prior to the central body, to which on its formation they either resigned certain powers, as in the case of Australia, or surrendered all their powers with certain specified exceptions, as in Canada and South Africa. Of such local Parliaments, Canada at the present time has nine, Australia six, and South Africa four.

Besides the Dominions above enumerated, the great Empire of India has internationally been accepted as a member of the League of Nations, and in its internal administration has been placed on the road, formerly traversed by the Dominions which are now fully self-governing, towards responsible government. India proved her loyalty to the Empire in the Great War and, as the result of the work of Royal Commissions and conferences, a constitution is now being worked out for India along Dominion lines. Although the steps so far taken do not meet the demands of the more radical elements, the result will probably mark as great an advance as the country is now prepared to make. The whole evolution of the Empire, throughout all its parts which are more than mere fortresses like Gibraltar or trading stations like Hong Kong, is in the direction of responsible government, to be attained in the dependencies as it has been in what used to be called the colonies, by the gradual extension of self-government in proportion to the growing capacities of their respective populations. It is the recognized aim of British administrators, by the extension of educational facilities and by just administration to develop these capacities to the utmost, so that in the dependencies, as well as in the Dominions and in the Mother Country, the constitutional history of the future may be a record of "freedom slowly broadening down from precedent to precedent".

A conference on the operation of Dominion legislation and merchant shipping legislation, arising out of the report of the Imperial Conference of 1926, was held in London from Oct. 8 to Dec. 4, 1929. This conference dealt with the power of disallowing or reserving Dominion legislation, the extra-territorial operation of Dominion legislation and merchant shipping legislation, on all which subjects its report was generally in the nature of giving effect to the definition of the equal status of the Dominions as made by the Imperial Conference of 1926.

PART I.—CONSTITUTION AND GENERAL GOVERNMENT.

Under the above heading a brief historical and descriptive account of the evolution of the general government of Canada was given on pp. 89-100 of the Canada Year Book, 1922-23.

PART II.—PROVINCIAL AND LOCAL GOVERNMENT.

Under the heading "Provincial and Local Government in Canada", a brief account of the government of each of the provinces of Canada and of its municipal institutions and judicial organization was published on pp. 101-115 of the 1922-23 edition of the Year Book.

PART III.—LEGISLATIVE AND EXECUTIVE AUTHORITIES.

Section 1.—Dominion Parliament and Ministry.

The Dominion Parliament is composed of the King, represented by the Governor General, the Senate and the House of Commons. The Governor General is appointed by the King on the advice of the Government of Canada. Members of the Senate are appointed for life by the Governor General in Council and members of the House of Commons are elected by the people. As a result of the working out of the democratic principle, the part played by the King's Representative and the Upper Chamber of Parliament in the country's legislation has been, in Canada as in the Mother Country, a steadily decreasing one, the chief responsibilities involved in legislation being assumed by the House of Commons.

Subsection 1.—The Governor General of Canada.

The Governor General is appointed by the King as his representative in Canada, usually for a term of five years, with a salary fixed at £10,000 sterling per annum and forming a charge against the consolidated revenue of the country. The Governor General is bound by the terms of his commission and can exercise only such authority as is expressly entrusted to him. He acts under the advice of his Ministry, which is responsible to Parliament, and, as the acting head of the Executive, summons, prorogues, and dissolves Parliament and assents to or reserves bills. In the discharge of these and other executive duties, he acts entirely by and with the advice of his Ministry (the Governor General in Council). The royal prerogative of mercy in capital cases, formerly exercised on the Governor General's own judgment and responsibility, is now exercised pursuant to the advice of the Ministry. The practice whereby the Governor General served as the medium of communication between the Canadian and the British Governments has been given up; since July 1, 1927, direct communication between His Majesty's Government in Canada and His Majesty's Government in Great Britain has been instituted.

A list of the Governors General from the time of Confederation, with the dates of their appointment and assumption of office, is given in Table **1.**

1.—Governors General of Canada, 1867-1932.

Name.	Date of Appointment.	Date of Assumption of Office.
Viscount Monck, G.C.M.G.	June 1, 1867	July 1, 1867
Lord Lisgar, G.C.M.G.	Dec. 29, 1868	Feb. 2, 1869
The Earl of Dufferin, K.P., K.C.B., G.C.M.G.	May 22, 1872	June 25, 1872
The Marquis of Lorne, K.T., G.C.M.G.	Oct. 5, 1878	Nov. 25, 1878
The Marquis of Lansdowne, G.C.M.G.	Aug. 18, 1883	Oct. 23, 1883
Lord Stanley of Preston, G.C.B.	May 1, 1888	June 11, 1888
The Earl of Aberdeen, K.T., G.C.M.G.	May 22, 1893	Sept. 18, 1893
The Earl of Minto, K.C.M.G.	July 30, 1898	Nov. 12, 1898
Earl Grey, G.C.M.G.	Sept. 26, 1904	Dec. 10, 1904
Field Marshal H.R.H. the Duke of Connaught, K.G.	Mar. 21, 1911	Oct. 13, 1911
The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O.	Aug. 19, 1916	Nov. 11, 1916
General the Lord Byng of Vimy, G.C.B., G.C.M.G., M.V.O.	Aug. 2, 1921	Aug. 11, 1921
Viscount Willingdon of Ratton, G.C.S.I., G.C.I.E., G.B.E.	Aug. 5, 1926	Oct. 2, 1926
The Earl of Bessborough, G.C.M.G.	Feb. 9, 1931	April 4, 1931

Subsection 2.—The Ministry.

A system of government based upon the British, by which a Cabinet or Ministry (composed of members of the House of Commons or the Senate), responsible to Parliament, holds office while it enjoys the confidence of the people's representatives, is found in Canada. The Cabinet is actually a committee of the King's Privy Council for Canada. Without enlarging upon the features of the system, it may be sufficient to note that the Cabinet is responsible to the House of Commons, and, following established precedent, resigns office when it becomes evident that it no longer holds the confidence of the people's representatives. Members of the Cabinet are chosen by the Prime Minister; each of them generally assumes charge of one of the various Departments of the Government, although one Minister may hold two portfolios at the same time, while other Ministers may be without portfolio.

The Prime Ministers since Confederation and the dates of their tenures of office, together with the members of the fifteenth Ministry are given in Table **2.** The complete list of the members of the King's Privy Council for Canada, as at Dec. 31, 1932, is added as Table **3.**

2.—Ministries since Confederation and Members of the Fifteenth Ministry.

Note.—A complete list of the members of Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1912, pp. 422–429. A list of the members of Dominion Ministries from 1911 to 1921 appeared in the Year Book of 1920, pp. 651–653. A list of the members of the twelfth and thirteenth Ministries appeared on pp.76–77 of the 1927–28 Year Book. Members of the fourteenth Ministry are listed at p. 65 of the 1929 Year Book and p. 69 of the 1930 Year Book.

1. Rt. Hon. Sir John A. Macdonald, Prime Minister. From July 1, 1867, to Nov. 6, 1873.
2. Hon. Alexander Mackenzie, Prime Minister. From Nov. 7, 1873, to Oct. 16, 1878.
3. Rt. Hon. Sir John A. Macdonald, Prime Minister. From Oct. 17, 1878, to June 6, 1891.
4. Hon. Sir John J. C. Abbott, Prime Minister. From June 16, 1891, to Dec. 5, 1892.
5. Hon. Sir John S. D. Thompson, Prime Minister. From Dec. 5, 1892, to Dec. 12, 1894.
6. Hon. Sir Mackenzie Bowell, Prime Minister. From Dec. 21, 1894, to April 27, 1896.
7. Hon. Sir Charles Tupper, Prime Minister. From May 1, 1896, to July 8, 1896.
8. Rt. Hon. Sir Wilfrid Laurier, Prime Minister. From July 11, 1896, to Oct. 6, 1911.
9. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Conservative Administration). From Oct. 10, 1911, to Oct. 12, 1917.
10. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Unionist Administration). From Oct. 12, 1917, to July 10, 1920.
11. Rt. Hon. Arthur Meighen, Prime Minister. (Unionist—"National Liberal and Conservative Party.") From July 10, 1920 to Dec. 29, 1921.
12. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Dec. 29, 1921, to June 28, 1926.
13. Rt. Hon. Arthur Meighen, Prime Minister. From June 29, 1926, to Sept. 25, 1926.
14. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Sept. 25, 1926, to Aug. 6, 1930.
15. Rt. Hon. R. B. Bennett, Prime Minister. From Aug. 7, 1930.

FIFTEENTH DOMINION MINISTRY.

(According to precedence of the Ministers as at the formation of the Cabinet.)

Office.	Occupant.	Date of Appointment.
Prime Minister, President of the Privy Council, Secretary of State for External Affairs	Right Hon. R. B. Bennett, K.C.	Aug. 7, 1930
Minister of Finance	Right Hon. R. B. Bennett, K.C. Hon. E. N. Rhodes, K.C.	Aug. 7, 1930 Feb. 3, 1932
Minister without Portfolio	Rt. Hon. Sir Geo. H. Perley, G.C.M.G.	Aug. 7, 1930
Minister without Portfolio	Right Hon. Arthur Meighen (Senator)	Feb. 3, 1932
Minister of Labour	Hon. Gideon D. Robertson (Senator) Hon. W. A. Gordon, K.C.	Aug. 7, 1930 Feb. 3, 1932
Minister of Justice and Attorney-General	Hon. Hugh Guthrie, K.C.	Aug. 7, 1930
Minister of Fisheries	Hon. E. N. Rhodes, K.C. Hon. Alfred Duranleau, K.C. (Acting)	Aug. 7, 1930 Feb. 3, 1932
Minister of Trade and Commerce	Hon. H. H. Stevens	Aug. 7, 1930
Minister of Railways and Canals	Hon. R. J. Manion, M.C., M.D.	Aug. 7, 1930
Minister of National Revenue	Hon. E. B. Ryckman, K.C.	Aug. 7, 1930
Minister without Portfolio	Hon. J. A. Macdonald	Aug. 7, 1930
Postmaster-General	Hon. Arthur Sauvé	Aug. 7, 1930
Minister of Pensions and National Health	Col. the Hon. Murray MacLaren, C.A.M.C., C.M.G., M.D., C.M., M.R.C.S.	Aug. 7, 1930
Minister of Public Works	Hon. H. A. Stewart, K.C.	Aug. 7, 1930
Secretary of State	Hon. C. H. Cahan, K.C.	Aug. 7, 1930
Minister of National Defence	Lt.-Col. the Hon. D. M. Sutherland, M.B., D.S.O.	Aug. 7, 1930
Minister of Marine	Hon. Alfred Duranleau, K.C.	Aug. 7, 1930
Minister of Interior and Superintendent-General of Indian Affairs	Hon. Thomas G. Murphy	Aug. 7, 1930
Solicitor-General	Hon. Maurice Dupré, K.C.	Aug. 7, 1930
Acting Minister of Immigration and Colonization and Minister of Mines	Hon. W. A. Gordon, K.C.	Aug. 7, 1930
Minister of Agriculture	Major the Hon. Robert Weir	Aug. 7, 1930

3.—Members of the King's Privy Council for the Dominion of Canada, according to Seniority Therein,[1] as at Dec. 31, 1932.

NOTE.—In this list the prefix Rt. Hon. indicates membership in the British Privy Council. Besides those mentioned in this list, the Rt. Hon. F. A. Anglin, Chief Justice of the Supreme Court,[7] and the Rt. Hon. L. P. Duff, Justice of the Supreme Court, are Canadian members of the British Privy Council.

Name.	Date when Sworn In.
The Rt. Hon. Sir William Mulock	July 13, 1896
The Rt. Hon. Sir Charles Fitzpatrick[5]	Feb. 11, 1902
The Hon. F. Oliver	April 8, 1905
The Hon. Sir A. B. Aylesworth	Oct. 16, 1905
The Hon. Rodolphe Lemieux	June 4, 1906
The Rt. Hon. George P. Graham	Aug. 30, 1907
The Hon. Chas. Murphy	Oct. 5, 1908
The Hon. R. Dandurand	Jan. 20, 1909
The Rt. Hon. W. L. Mackenzie King[4]	June 2, 1909
The Hon. Henri S. Béland	Aug. 19, 1911
The Rt. Hon. Sir Robert Laird Borden	Oct. 10, 1911
The Rt. Hon. Sir George Halsey Perley[2]	Oct. 10, 1911
The Hon. Robert Rogers	Oct. 10, 1911
The Rt. Hon. Sir Thomas White	Oct. 10, 1911
The Hon. Sir John Douglas Hazen	Oct. 10, 1911
The Hon. William James Roche	Oct. 10, 1911
The Hon. Wilfrid Bruno Nantel	Oct. 10, 1911
The Hon. Martin Burrell	Oct. 16, 1911
The Hon. Charles Marcil	Feb. 15, 1912
The Hon. Louis Coderre	Oct. 29, 1912
The Hon. Pierre Edouard Blondin	Oct. 20, 1914
The Rt. Hon. Arthur Meighen[2]	Oct. 2, 1915
The Hon. Esioff Léon Patenaude	Oct. 6, 1915
The Rt. Hon. William Morris Hughes	Feb. 18, 1916
The Hon. Albert Sévigny	Jan. 8, 1917
The Hon. Charles Colquhoun Ballantyne	Oct. 3, 1917
The Hon. James Alexander Calder	Oct. 12, 1917
The Hon. Newton Wesley Rowell	Oct. 12, 1917
The Hon. Sydney Chilton Mewburn	Oct. 12, 1917
The Hon. Thomas Alexander Crerar	Oct. 12, 1917
The Hon. Alexander K. Maclean	Oct. 23, 1917
The Hon. Gideon D. Robertson	Oct. 23, 1917
The Hon. Sir Hormisdas Laporte	Nov. 13, 1917
The Hon. Hugh Guthrie[2]	July 5, 1919
The Hon. Sir Henry Lumley Drayton	Aug. 2, 1919
The Hon. Simon Fraser Tolmie	Aug. 12, 1919
The Hon. Fleming Blanchard McCurdy	July 13, 1920
The Hon. Rupert W. Wigmore	July 13, 1920
The Hon. Edgar N. Rhodes[2]	Feb. 22, 1921
The Hon. John Babington Macaulay Baxter	Sept. 21, 1921
The Hon. Henry Herbert Stevens[2]	Sept. 21, 1921
The Hon. Robert James Manion[2]	Sept. 22, 1921
The Hon. James Robert Wilson	Sept. 26, 1921
The Rt. Hon. Richard Bedford Bennett[3]	Oct. 4, 1921
The Hon. Ernest Lapointe	Dec. 29, 1921
The Hon. Arthur Bliss Copp	Dec. 29, 1921
The Hon. Charles Stewart	Dec. 29, 1921
The Hon. William Richard Motherwell	Dec. 29, 1921
The Hon. James Murdock	Dec. 29, 1921
The Hon. John Ewan Sinclair	Dec. 30, 1921
The Hon. James H. King	Feb. 3, 1922
The Hon. Edward Mortimer Macdonald	April 12, 1923
The Hon. Edward James McMurray	Nov. 14, 1923
The Hon. Pierre Joseph Arthur Cardin	Jan. 30, 1924
The Hon. Fréderic Liguori Béique	May 20, 1925
The Hon. George Newcombe Gordon	Sept. 7, 1925
The Hon. Herbert Marler[6]	Sept. 9, 1925
The Hon. Charles Vincent Massey	Sept. 16, 1925
The Hon. Walter Edward Foster	Sept. 26, 1925
The Hon. Philippe Roy[6]	Feb. 9, 1926
The Hon. Charles A. Dunning	Mar. 1, 1926
The Hon. John C. Elliott	Mar. 8, 1926
The Hon. William Anderson Black	June 29, 1926
The Hon. James D. Chaplin	July 13, 1926
The Hon. George Burpee Jones	July 13, 1926
The Hon. Edmond Baird Ryckman[2]	July 13, 1926
The Hon. Donald Sutherland	July 13, 1926
The Hon. Raymond Ducharme Morand	July 13, 1926
The Hon. John Alexander Macdonald[2]	July 13, 1926
The Hon. John Leo Chabot	July 19, 1926
The Hon. Eugéne Paquet	Aug. 23, 1926
The Hon. Guillaume André Fauteux	Aug. 23, 1926
The Hon. Lucien Cannon	Sept. 25, 1926
The Hon. Peter John Veniot	Sept. 25, 1926
The Hon. William D. Euler	Sept. 25, 1926
The Hon. Fernand Rinfret	Sept. 25, 1926
The Hon. James Malcolm	Sept. 25, 1926
The Hon. Robert Forke	Sept. 25, 1926
The Hon. Peter Heenan	Sept. 25, 1926
The Hon. James Layton Ralston	Oct. 8, 1926
H.R.H. Edward Albert Christian George Andrew Patrick David, Prince of Wales	Aug. 2, 1927
The Rt. Hon. Stanley Baldwin	Aug. 2, 1927
The Hon. Thomas Ahearn	Jan. 16, 1928
The Rt. Hon. James Ramsay MacDonald	Oct. 18, 1929
The Hon. William Frederick Kay	June 17, 1930
The Hon. Cyrus Macmillan	June 17, 1930
The Hon. Ian Alistair Mackenzie	June 27, 1930
The Hon. Arthur C. Hardy	July 31, 1930
The Hon. Arthur Sauvé[2]	Aug. 7, 1930
The Hon. Murray MacLaren[2]	Aug. 7, 1930
The Hon. Hugh Alexander Stewart[2]	Aug. 7, 1930
The Hon. Charles Hazlitt Cahan[2]	Aug. 7, 1930
The Hon. Donald Matheson Sutherland[2]	Aug. 7, 1930
The Hon. Alfred Duranleau[2]	Aug. 7, 1930
The Hon. Thomas Gerow Murphy[2]	Aug. 7, 1930
The Hon. Maurice Dupré[2]	Aug. 7, 1930
The Hon. Wesley Ashton Gordon[2]	Aug. 7, 1930
The Hon. Robert Weir[2]	Aug. 7, 1930
The Hon. G. Howard Ferguson[6]	Jan. 14, 1931
The Hon. W. D. Herridge[6]	June 17, 1931

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[1] As in the case of Privy Councillors of the United Kingdom, members of His Majesty's Privy Council for Canada take rank *inter se* according to the dates of their being sworn in. [2] Ranks as a Member of the Cabinet. [3] Ranks as the Prime Minister of Canada. [4] Ranks as the Leader of the Opposition. [5] Ranks as Retired Chief Justice of Canada. [6] Canadian Ministers abroad. [7] Rt. Hon. F. A. Anglin died Mar. 2, 1933.

In Table **4** are given the dates of the opening and prorogation of the sessions of the various Dominion Parliaments from 1867 to 1932.

4.—Duration and Sessions of Dominion Parliaments, 1867-1932.

Number of Parliament.	Session.	Date of Opening.	Date of Prorogation.	Days of Session.	Elections, Writs Returnable, Dissolutions and Length of Parliaments.[7]
1st Parliament..........	1st	Nov. 1, 1867	May 22, 1868	118[1]	Aug., Sept., 1867.[3] Sept. 24, 1867.[4] July 8, 1872.[5] 4 y., 9 m., 15 d[6].
	2nd	April 15, 1869	June 22, 1869	69	
	3rd	Feb. 15, 1870	May 12, 1870	87	
	4th	Feb. 15, 1871	April 14, 1871	59	
	5th	April 11, 1872	June 14, 1872	65	
2nd Parliament..........	1st	Mar. 5, 1873	Aug. 13, 1873	81[2]	July, Aug., Sept., 1872.[3] Sept. 3, 1872.[4] Jan. 2, 1874.[5] 1 y., 4 m., 0 d.[6]
	2nd	Oct. 23, 1873	Nov. 7, 1873	16	
3rd Parliament..........	1st	Mar. 26, 1874	May 26, 1874	62	Jan. 22, 1874.[3] Feb. 21, 1874.[4] Aug. 17, 1878.[5] 4 y., 5 m., 25 d.[6]
	2nd	Feb. 4, 1875	April 8, 1875	64	
	3rd	Feb. 10, 1876	April 12, 1876	63	
	4th	Feb. 8, 1877	April 28, 1877	80	
	5th	Feb. 7, 1878	May 10, 1878	93	
4th Parliament..........	1st	Feb. 13, 1879	May 15, 1879	92	Sept. 17, 1878.[3] Nov. 21, 1878.[4] May 18, 1882.[5] 3 y., 5 m., 28 d.[6]
	2nd	Feb. 12, 1880	May 7, 1880	86	
	3rd	Dec. 9, 1880	Mar. 21, 1881	103	
	4th	Feb. 9, 1882	May 17, 1882	98	
5th Parliament..........	1st	Feb. 8, 1883	May 25, 1883	107	June 20, 1882.[3] Aug. 7, 1882.[4] Jan. 15, 1887.[5] 4 y., 5 m., 10 d.[6]
	2nd	Jan. 17, 1884	April 19, 1884	94	
	3rd	Jan. 29, 1885	July 20, 1885	173	
	4th	Feb. 25, 1886	June 2, 1886	98	
6th Parliament..........	1st	April 13, 1887	June 23, 1887	72	Feb. 22, 1887.[3] April 7, 1887.[4] Feb. 3, 1891.[5] 3 y., 9 m., 27 d.[6]
	2nd	Feb. 23, 1888	May 22, 1888	90	
	3rd	Jan. 31, 1889	May 2, 1889	92	
	4th	Jan. 16, 1890	May 16, 1890	121	
7th Parliament..........	1st	April 29, 1891	Sept. 30, 1891	155	Mar. 5, 1891.[3] April 25, 1891.[4] April 24, 1896.[5] 5 y., 0 m., 0 d.[6]
	2nd	Feb. 25, 1892	July 9, 1892	136	
	3rd	Jan. 26, 1893	April 1, 1893	66	
	4th	Mar. 15, 1894	July 23, 1894	131	
	5th	April 18, 1895	July 22, 1895	96	
	6th	Jan. 2, 1896	April 23, 1896	111	
8th Parliament..........	1st	Aug. 19, 1896	Oct. 5, 1896	48	June 23, 1896.[3] July 13, 1896.[4] Oct. 9, 1900.[5] 4 y., 2 m., 26 d.[6]
	2nd	Mar. 25, 1897	June 29, 1897	97	
	3rd	Feb. 3, 1898	June 13, 1898	131	
	4th	Mar. 16, 1899	Aug. 11, 1899	149	
	5th	Feb. 1, 1900	July 18, 1900	168	
9th Parliament..........	1st	Feb. 6, 1901	May 23, 1901	107	Nov. 7, 1900.[3] Dec. 5, 1900.[4] Sept. 29, 1904.[5] 3 y., 9 m., 26 d.[6]
	2nd	Feb. 13, 1902	May 15, 1902	90	
	3rd	Mar. 12, 1903	Oct. 24, 1903	227	
	4th	Mar. 10, 1904	Aug. 10, 1904	154	
10th Parliament..........	1st	Jan. 11, 1905	July 20, 1905	191	Nov. 3, 1904.[3] Dec. 15, 1904.[4] Sept. 17, 1908.[5] 3 y., 9 m., 4 d.[6]
	2nd	Mar. 8, 1906	July 13, 1906	128	
	3rd	Nov. 22, 1906	April 27, 1907	157	
	4th	Nov. 28, 1907	July 20, 1908	236	
11th Parliament..........	1st	Jan. 20, 1909	May 19, 1909	120	Oct. 26, 1908.[3] Dec. 3, 1908.[4] July 29, 1911.[5] 2 y., 7 m., 28 d.[6]
	2nd	Nov. 11, 1909	May 4, 1910	175	
	3rd	Nov. 17, 1910	July 29, 1911	196[8]	
12th Parliament..........	1st	Nov. 15, 1911	April 1, 1912	139	Sept. 21, 1911.[3] Oct. 7, 1911.[4] Oct. 6, 1917.[5] 6 y., 0 m., 0 d.[6]
	2nd	Nov. 21, 1912	June 6, 1913	173[9]	
	3rd	Jan. 15, 1914	June 12, 1914	148	
	4th	Aug. 18, 1914	Aug. 22, 1914	5	
	5th	Feb. 4, 1915	April 15, 1915	71	
	6th	Jan. 12, 1916	May 18, 1916	127	
	7th	Jan. 18, 1917	Sept. 20, 1917	207[10]	
13th Parliament..........	1st	Mar. 18, 1918	May 24, 1918	68	Dec. 17, 1917.[3] Feb. 27, 1918.[4] Oct. 4, 1921.[5] 3 y., 7 m., 6 d.[6]
	2nd	Feb. 20, 1919	July 7, 1919	138	
	3rd	Sept. 1, 1919	Nov. 10, 1919	71	
	4th	Feb. 26, 1920	July 1, 1920	127	
	5th	Feb. 14, 1921	June 4, 1921	111	

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[1] Adjourned from Dec. 21, 1867 to Mar. 12, 1868, to allow the local Legislatures to meet. [2] Adjourned May 23 till Aug. 13. [3] Period of general elections. [4] Writs returnable. [5] Dissolution of Parliament. [6] Duration of Parliament in years, months and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. [7] The ordinary legal limit of duration for each Parliament is five years. [8] Not including days (59) of adjournment from May 19 to July 18. [9] Not including days (25) of adjournment from Dec. 19, 1912 to Jan. 14, 1913. [10] Not including days (39) of adjournment from Feb. 7 to Mar. 19, 1917.

4.—Duration and Sessions of Dominion Parliaments, 1867-1932—concluded.

Number of Parliament.	Session.	Date of Opening.	Date of Prorogation.	Days of Session.	Elections, Writs Returnable, Dissolutions and Length of Parliaments.[7]
14th Parliament	1st 2nd 3rd 4th	Mar. 8, 1922 Jan. 31, 1923 Feb. 28, 1924 Feb. 5, 1925	June 28, 1922 June 30, 1923 July 19, 1924 June 27, 1925	113 151 143 143	Dec. 6, 1921.[3] Jan. 14, 1922.[4] Sept. 5, 1925.[5] 3 y., 7 m., 26 d.[6]
15th Parliament	1st	Jan. 7, 1926	July 2, 1926	177[1]	Oct. 29, 1925.[3] Dec. 7, 1925.[4] July 2, 1926.[5] 208 d.[6]
16th Parliament	1st 2nd 3rd 4th	Dec. 9, 1926 Jan. 26, 1928 Feb. 7, 1929 Feb. 20, 1930	April 14, 1927 June 11, 1928 June 14, 1929 May 30, 1930	73[2] 138 128 100	Sept. 14, 1926.[3] Nov. 2, 1926.[4] May 30, 1930.[5] 3 y., 7 m., 0 d.[6]
17th Parliament	1st 2nd 3rd 4th	Sept. 8, 1930 Mar. 12, 1931 Feb. 4, 1932 Oct. 6, 1932	Sept. 22, 1930 Aug. 3, 1931 May 26, 1932	15 145 113	July 28, 1930.[3] Aug. 18, 1930.[4]

[1] Including days (13) of adjournment from Mar. 3 to Mar. 15. [2] Not including days (54) of adjournment from Dec. 15 to Feb. 8. [3] Period of general elections. [4] Writs returnable. [5] Dissolution of Parliament. [6] Duration of Parliament in years, months and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. [7] The ordinary legal limit of duration for each Parliament is five years.

A brief résumé of the history of parliamentary representation follows. Attention may be drawn to the growth in the number of members of both the Senate and the House of Commons since Confederation and to the greatly increased unit of representation in the Lower House.

Subsection 3.—The Senate.

The British North America Act, 1867, provides in sections 21 and 22 that "the Senate shall consist of seventy-two members, who shall be styled Senators. In relation to the constitution of the Senate, Canada shall be deemed to consist of three divisions—(1) Ontario; (2) Quebec; (3) The Maritime Provinces, Nova Scotia and New Brunswick; which three divisions shall be equally represented in the Senate as follows: Ontario by twenty-four senators; Quebec by twenty-four senators; and the Maritime Provinces by twenty-four senators, twelve thereof representing New Brunswick and twelve thereof representing Nova Scotia. In the case of Quebec, each of the twenty-four senators representing the province shall be appointed for one of the electoral divisions of Lower Canada specified in schedule A to Chapter I of the Consolidated Statutes of Canada". Further, under section 147 of the same Act, it is provided that "in case of the admission to Confederation of Newfoundland or Prince Edward Island, . . . each shall be entitled to a representation in the Senate of four members". "Prince Edward Island when admitted shall be deemed to be comprised in the third of the three divisions into which Canada is divided by this Act" and on its admission "the representation of Nova Scotia and New Brunswick shall, as vacancies occur, be reduced from twelve to ten members respectively". In case of the admission of Newfoundland, the normal membership of the Senate of 72 members was to be increased to 76, while the maximum number of 78 (sec. 28) was to be 82, sec. 26 containing a provision for the appointment of three or six additional members in certain cases, to represent equally the three divisions of Canada.

By 33 Vict., c. 3, an Act to establish and provide for the government of the province of Manitoba, passed in 1870, the newly formed province was given representation of two members in the Senate, provision being made at the same time for increases in representation to three and four on increases of population, according to the decennial census, to 50,000 and 75,000 respectively. In the following year, British Columbia, on being admitted to the Union by an Imperial Order in Council of May 16, 1871, was given representation by three senators. Two years later, when Prince Edward Island was admitted to Confederation by an Imperial Order in Council of June 26, 1873, it was granted representation in the Senate of four members under the terms of the British North America Act, as cited above. Thus, in 1873, the seven provinces of Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia and Prince Edward Island were represented by a total of 77 members in the Senate, their individual representation at the time being 24, 24, 10, 10, 2, 3 and 4 members respectively.

In 1882, following the 1881 census and an increase of population in Manitoba to 62,260 persons, the representation of this province was increased to three members under authority of the Manitoba Act, 1870. Later, by 50-51 Vict., c. 38, an Act of 1887, the representation of the Northwest Territories in the Senate was fixed at two members. A subsequent increase resulted from the growth of population in Manitoba to 152,506, as shown by the census of 1891, the province being granted a fourth senator under the terms of the Manitoba Act of 1870. An Act passed in the session of 1903, 3 Edw. VII, c. 42, provided for an increase in the representation of the Northwest Territories from two to four members, bringing the total representation at this date to 83 members.

On the establishment of the provinces of Alberta and Saskatchewan out of the former Northwest Territories in 1905, under 4-5 Edw. VII, cc. 3 and 42, provision was made for their representation in the Senate by 4 members each, which might be increased by Parliament to 6 on the completion of the next decennial census. This change in representation brought the membership of the Upper Chamber to a total of 87.

In 1915, by an amendment to the British North America Act (5-6 Geo. V, c. 45), an important change was made with regard to the constitution of the Senate. The number of divisions provided for by section 22 of the original Act was increased from three to four, the fourth comprising the four western provinces of Manitoba, Saskatchewan, Alberta and British Columbia. Each of these provinces was to be represented by 6 members under the Act, the division being thus represented by 24 members and placed on an equality with the others with respect to membership. A corresponding change was made in the number of additional senators provided for by the original British North America Act, by substituting increases of four or eight members for the three or six cited in section 26 of the Act of 1867 Normal representation, therefore, is at present fixed at 96, which number may be increased if necessary to 100 or to a maximum of 104.

The entry of Newfoundland to the Union is still provided for by the above Act, subsection 6 of sec. 1 of which sets out its representation as six members instead of the four granted by the Act of 1867. If Newfoundland were admitted to the Dominion, the normal number of senators would be 102 with a maximum of 110.

In Table 5 the growth of membership in the Senate is shown by divisions and provinces from 1867 to 1915, since when no change has taken place. The names and addresses of the senators from each province are given as at Mar. 1, 1933, in Table 6.

5.—Growth of Representation in the Senate, 1867-1933.

Province.	1867.	1870.	1871.	1873.	1882.	1887.	1892.	1903.	1905.	1915-1933.
(1) Ontario	24	24	24	24	24	24	24	24	24	24
(2) Quebec	24	24	24	24	24	24	24	24	24	24
(3) Maritime Provinces	24	24	24	24	24	24	24	24	24	24
Nova Scotia	12	12	12	10	10	10	10	10	10	10
New Brunswick	12	12	12	10	10	10	10	10	10	10
Prince Edward Island	–	–	–	4	4	4	4	4	4	4
(4) Western Provinces	–	2	5	5	6	8	9	11	15	24
Manitoba	–	2	2	2	3	3	4	4	4	6
British Columbia	–	–	3	3	3	3	3	3	3	6
Saskatchewan	–	–	–	–	–	2	2	4	4	6
Alberta	–	–	–	–	–				4	6
Totals	**72**	**74**	**77**	**77**	**78**	**80**	**81**	**83**	**87**	**96**

6.—Representation in the Senate of Canada, by Provinces, as at Mar. 1, 1933.

Name of Senator.	Post Office Address.
Prince Edward Island—(4 senators).	
McLean, John	Souris.
Hughes, James J.	Souris.
MacArthur, Creelman	Summerside.
Sinclair, John E., P.C.	Emerald.
Nova Scotia—(10 senators—one vacancy).	
McLennan, John S.	Sydney.
Tanner, C. E.	Pictou.
Stanfield, John	Truro.
McCormick, John	Sydney Mines.
Martin, Peter	Halifax.
Hatfield, Paul L.	Yarmouth.
Logan, H. J.	Parrsboro.
Dennis, W. H.	Halifax.
MacDonald, J. A.	St. Peters.
New Brunswick—(10 senators—two vacancies).	
Poirier, Pascal	Shediac.
Bourque, T. J.	Richibucto.
McDonald, J. A.	Shediac.
Black, Frank B.	Sackville.
Turgeon, Onésiphore	Bathurst.
Robinson, C. W.	Moncton.
Copp, A. B., P.C.	Sackville.
Foster, W. E., P.C.	Saint John.
Quebec—(24 senators—one vacancy).	
Dandurand, R., P.C.	Montreal.
Casgrain, J. P. B.	Montreal.
Béique, F. L., P.C.	Montreal.
Tessier, Jules	Quebec.
Wilson, J. M.	Montreal.
Pope, Rufus H.	Cookshire.
Beaubien, C. P.	Montreal.
L'Espérance, D. O.	Quebec.
White, R. S.	Montreal.
Quebec—concluded.	
Blondin, P. E., P.C.	Montreal.
Chapais, Thomas	Quebec.
Webster, L. C.	Montreal.
Béland, H. S., P.C.	St. Joseph de Beauce.
Raymond, Donat	Montreal.
Paradis, Philippe J.	Quebec.
Lemieux, R., P.C.	Ottawa.
Tobin, E. W.	Bromptonville.
Parent, G.	Quebec.
Prévost, J. E.	St. Jérôme.
Wilson, L. A.	Coteau du Lac.
Ballantyne, C. C.	Montreal.
Rainville, J. H.	St. Lambert.
Brown, A. J.	Montreal.
Ontario—(24 senators—two vacancies).	
Gordon, Geo.	North Bay.
Smith, E. D.	Winona.
Donnelly, J. J.	Pinkerton.
Lynch-Staunton, G.	Hamilton.
Robertson, G. D., P.C.	Welland.
Fisher, J. H.	Paris.
White, G. V.	Pembroke.
Macdonell, A. H., C.M.G.	Toronto.
Hardy, A. C.	Brockville.
Aylesworth, Sir A. B., P.C.	Toronto.
Murphy, Chas., P.C.	Ottawa.
Lewis, John	Toronto.
Rankin, Jas. P.	Stratford.
Graham, Rt. Hon. George P., P.C.	Brockville.
McGuire, William H.	Toronto.
Spence, Jas. H.	Toronto.
Little, Edgar S.	London.
Lacasse, Gustave	Tecumseh.
Horsey, H. H.	Cressy.
Wilson, Cairine R.	Ottawa.
Murdock, J., P.C.	Ottawa.
Meighen, Rt. Hon. A., P.C.	Toronto.

6.—Representation in the Senate of Canada, by Provinces as at Mar. 1, 1933—concluded.

Name of Senator.	Post Office Address.	Name of Senator.	Post Office Address.
Manitoba—(6 senators).		**Alberta**—(6 senators).	
Sharpe, W. H.	Manitou.	Michener, Edward	Red Deer.
McMeans, L.	Winnipeg.	Harmer, Wm. J.	Edmonton.
Pénard, Aimé	Winnipeg.	Griesbach, W. A., C.B., C.M.G.	Edmonton.
Schaffner, F. L.	Winnipeg.	Buchanan, W. A.	Lethbridge.
Molloy, J. P.	Morris.	Riley, Daniel E.	High River.
Forke, Robert, P.C.	Pipestone.	Burns, P.	Calgary.
Saskatchewan—(6 senators—two vacancies).		**British Columbia**—(6 senators).	
Laird, H. W.	Regina.	Planta, A. E.	Nanaimo.
Calder, J. A., P.C.	Regina.	Barnard, G. H.	Victoria.
Gillis, A. B.	Whitewood.	Taylor, J. D.	New Westminster.
Marcotte, A., K.C.	Saskatoon.	Green, R. F.	Victoria.
		King, J. H., P.C.	Vancouver.
		McRae, A. D.	Vancouver.

Subsection 4.—The House of Commons.

In section 37 of the original British North America Act of 1867 (30 Vict., c. 3), it was provided that "The House of Commons shall . . . consist of one hundred and eighty-one members, of whom eighty-two shall be elected for Ontario, sixty-five for Quebec, nineteen for Nova Scotia, and fifteen for New Brunswick". Further, under section 51, it was enacted that after the completion of the census of 1871 and of each subsequent decennial census, the representation of the four provinces should be readjusted by such authority, in such manner, and from such time, as the Parliament of Canada provided, subject to and according to the following rules:—

"(1) Quebec shall have the fixed Number of Sixty-five Members;

"(2) There shall be assigned to each of the other Provinces such a Number of Members as will bear the same Proportion to the Number of its Population (ascertained at such Census) as the Number Sixty-five bears to the Number of the Population of Quebec (so ascertained);

"(3) In the Computation of the Number of Members for a Province a fractional Part not exceeding One Half of the whole Number requisite for entitling the Province to a Member shall be disregarded; but a fractional Part exceeding One Half of that Number shall be equivalent to the whole Number;

"(4) On any such Re-adjustment the Number of Members for a Province shall not be reduced unless the Proportion which the Number of the Population of the Province bore to the Number of the aggregate Population of Canada at the then last preceding Re-adjustment of the Number of Members for the Province is ascertained at the then latest Census to be diminished by One Twentieth Part or upwards;

"(5) Such Re-adjustment shall not take effect until the Termination of the then existing Parliament".

Again, in section 52, it was enacted that "the number of members of the House of Commons may be from time to time increased by the Parliament of Canada, provided the proportionate representation of the Provinces prescribed by this Act is not thereby disturbed".

Later on, by the British North America Act of 1886 (49-50 Vict., c. 35), provision was made in section 1 that "the Parliament of Canada may from time to time make provision for the representation in the Senate and House of Commons of Canada, or in either of them, of any territories which for the time being form part of the Dominion of Canada, but are not included in any province thereof".

Again in 1915, an amendment to the British North America Act (5-6 Geo V, c. 45) was passed by the Imperial Parliament, providing that "notwithstanding anything in the said Act, a province shall always be entitled to a number of members in the House of Commons not less than the number of senators representing such province".

Readjustments in Representation.—As set out in the above-mentioned provisions of the British North America Act, the first Dominion Parliament of 1867 consisted at its commencement of 181 members, 82 for Ontario, 65 for Quebec, 19 for Nova Scotia and 15 for New Brunswick. To this number were added, under the Manitoba Act of 1870 (33 Vict., c. 3), 4 members to represent the newly created province of Manitoba; also, according to the agreement under which British Columbia entered Confederation, ratified by Imperial Order in Council of May 16, 1871, 6 members were added to represent the new province, making a total of 191 members at the end of the first Parliament of Canada.

Arising out of the first census of the Dominion in 1871, a readjustment of representation took place in 1872 (c. 15 of 1872), increasing the representation of Ontario from 82 to 88, of Nova Scotia from 19 to 21 and of New Brunswick from 15 to 16 members, the 9 additional members bringing the total number of representatives up to 200. To these were added in 1874, as a result of the agreement under which Prince Edward Island entered Confederation (ratified by Imperial Order in Council of June 26, 1873), 6 members representing that province—bringing the membership of the House of Commons to 206.

Results of the second census, that of 1881, necessitated the passage of a new Representation Act (45 Vict., c. 3), increasing the representation of Ontario from 88 to 92 and that of Manitoba from 4 to 5, thus bringing the membership of the House of Commons to 211 members. To these were added, under the provisions of 49 Vict., c. 24, passed in 1886, 4 members for the Northwest Territories (2 for the then provisional district of Assiniboia and 1 each for the then provisional districts of Alberta and Saskatchewan), bringing the total membership to 215.

The third census, of 1891, was followed by another readjustment of representation, reducing the representation of Nova Scotia from 21 to 20, of New Brunswick from 16 to 14, of Prince Edward Island from 6 to 5, and increasing the representation of Manitoba from 5 to 7, the representation of the other provinces remaining as before. The net result was a reduction in the number of members of the House from 215 to 213.

The fourth census, of 1901, resulted in a readjustment in 1903, reducing the representation of Ontario from 92 to 86, of Nova Scotia from 20 to 18, of New Brunswick from 14 to 13, of Prince Edward Island from 5 to 4. On the other hand, the representation of Manitoba was increased from 7 to 10, of British Columbia from 6 to 7, of the Northwest Territories from 4 to 10. By chapter 37 of the Statutes of 1902, a member had been added for Yukon Territory, so that the net effect of the changes was to keep the membership at 214 in the early years of the present century. The extremely rapid growth of the Northwest Territories, however, led to their division and the admission to Confederation in 1905 of the provinces of Alberta and Saskatchewan. In the Acts admitting them—the Alberta Act (4-5 Edw. VII,

c. 3) and the Saskatchewan Act (4-5 Edw. VII, c. 42)—it was provided that their representation should be readjusted on the basis of the results of the quinquennial census of 1906. The Representation Act of 1907, implementing this pledge, increased the representation of Saskatchewan from 6 to 10 and of Alberta from 4 to 7 members, thus raising the total membership of the House of Commons to 221.

The census of 1911, with its very large but very unevenly distributed increase of population, led to considerable changes in representation, enacted by the Representation Act of 1914. The representation of Ontario was reduced from 86 to 82, of Nova Scotia from 18 to 16, of New Brunswick from 13 to 11, of Prince Edward Island from 4 to 3. On the other hand, the representation of Manitoba was raised from 10 to 15, of Saskatchewan from 10 to 16, of Alberta from 7 to 12 and of British Columbia from 7 to 13. The net result was an increase of 13 members in the total membership of the House of Commons, bringing the figure to 234. However, in the following session the amendment to the British North America Act, already referred to, resulted in the retention by Prince Edward Island of her fourth member (since she had 4 senators). (See also 5 Geo. V, c. 19). The total membership, therefore, of the House of Commons in the thirteenth and fourteenth Parliaments (elected in 1917 and 1921 respectively) was 235.

As a result of the smaller increase of population shown by the census of 1921, the changes in representation were less far-reaching. Nova Scotia lost 2 members and the West gained 12, 2 of these being added to Manitoba, 5 to Saskatchewan, 4 to Alberta and 1 to British Columbia. The representation of the remaining four provinces was unchanged. Prince Edward Island retained its 4 members because of the provisions of the British North America Act of 1915, to the effect that the members of the House of Commons returned by a province shall never be fewer than its senators. Ontario, again, retained its 82 members because under subsection 4 of section 51 of the British North America Act (quoted p. 79), the proportion which its population bore to the aggregate population of the Dominion had not declined by one-twentieth. Further, by the Quebec Boundaries Extension Act of 1912, it had been stipulated that the population of the added area (Ungava) should not be included for the purpose of determining the unit of representation, so that the 1921 population of Quebec, within its 1911 boundaries, *viz.*, 2,358,412, divided by the fixed number of 65 seats for that province, became the new unit of representation, 36,283.

The number of representatives of each province elected at each of the seventeen general elections since Confederation is given in Table **7**.

7.—Representation in the House of Commons as at Dominion General Elections, 1867-1930.

Province.	1867.	1872.	1874.	1878	1882.	1887.	1891.	1896.	1900.	1904.	1908.	1911.	1917.	1921.	1925.[1]
Ontario	82	88	88	88	92	92	92	92	92	86	86	86	82	82	82
Quebec	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Nova Scotia	19	21	21	21	21	21	21	20	20	18	18	18	16	16	14
New Brunswick	15	16	16	16	16	16	16	14	14	13	13	13	11	11	11
Manitoba	–	4	4	4	5	5	5	7	7	10	10	10	15	15	17
British Columbia	–	6	6	6	6	6	6	6	6	7	7	7	13	13	14
P. E. Island	–	–	6	6	6	6	6	5	5	4	4	4	4	4	4
Saskatchewan	–	–	–	–	–	4	4	4	4	10	10	10	16	16	21
Alberta	–	–	–	–	–						7	7	12	12	16
Yukon	–	–	–	–	–	–	–	–	–	1	1	1	1	1	1
Totals	**181**	**200**	**206**	**206**	**211**	**215**	**215**	**213**	**213**	**214**	**221**	**221**	**235**	**235**	**245**

[1] The representation at the general elections of 1926 and 1930 was the same as in 1925.

The Unit of Representation.—While the number of members of the House of Commons has been growing fairly steadily since Confederation, the unit of representation—one-sixty-fifth of the population of Quebec within its 1911 boundaries—has also been increased after each census in consequence of the growth of the population of Quebec. The units of representation, as determined by the decennial censuses taken since Confederation, are as follows: 1871, 18,331 persons; 1881, 20,908; 1891, 22,901; 1901, 25,368; 1911, 30,819; 1921, 36,283; 1931, 44,186, being one-sixty-fifth of the population of Quebec exclusive of Ungava.

The 1931 Redistribution Problem.—The population of Quebec in 1931, exclusive of the population (2,177) of the territory added to Quebec by the Boundaries Extension Act of 1912, was 2,872,078, which, divided by 65, gives a unit of representation of 44,186. The quotient obtained by dividing the population of each province as shown at the date of the census by 44,186 indicates (except where subsection 4 of section 51 of the British North America Act and the Amending Act of 1915 apply) the number of members to which each province is entitled. These numbers as determined by the census of 1931 and the two preceding censuses are shown in Table 8.

8.—Representation of the Provinces and Territories of Canada in the House of Commons, as Determined by the Censuses of 1931, 1921 and 1911.

Province.	Census 1931.			Census 1921.			Census 1911.		
	Population.	Quotient based on Unit. (44,186)	Representation.	Population.	Quotient based on Unit. (36,283)	Representation.	Population.	Quotient based on Unit. (30,819)	Representation.
P. E. I.	88,038	1·99	4	88,615	2·44	4	93,728	3·04	4
N.S.	512,846	11·61	12	523,837	14·44	14	492,338	15·98	16
N.B.	408,219	9·24	10	387,876	10·69	11	351,889	11·42	11
Ont.	3,431,683	77·66	82	2,933,662	80·86	82	2,527,292	82·00	82
Man.	700,139	15·85	17	610,118	16·82	17	461,394	14·97	15
Sask.	921,785	20·86	21	757,510	20·88	21	492,432	15·98	16
Alta.	731,605	16·56	17	588,454	16·22	16	374,295	12·41	12
B.C.	694,263	15·71	16	524,582	14·46	14	392,480	12·74	13
Quebec (without New Quebec)	2,872,078	65·00	65	2,358,412	65·00	65	2,003,232	65·00	65
Totals	**10,360,656**	–	**244**	**8,773,066**	–	**244**	**7,189,030**	–	**234**
Quebec (New Quebec)	2,177[1]	–	–	2,253[1]	–	–	2,544[1]	–	–
Yukon	4,230	–	1	4,157	–	1	8,512	–	1
N.W.T.	9,723	–	–	7,988	–	–	6,507	–	–
R.C. Navy	–	–	–	485	–	–	–	–	–
Canada	**10,376,786**	–	**245**	**8,787,949**	–	**245**	**7,206,643**	–	**235**

[1] Represents the population in the area added to Quebec by the Quebec Boundaries Extension Act, 1912, the population of which by sec. 2, ss. "A" of said Act, is to be excluded from the population of the province in ascertaining the unit of representation.

The application of the provisions of subsection 4 of section 51 of the British North America Act (quoted on p. 79) to Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba (the provinces in which a decrease in the rate of growth of population as compared with the rate of Canada as a whole, has taken place), is shown in the following statement:—

Province.	Proportion which Population of each Province Bears to the Total Population in Canada.		Decrease in Proportion from 1921-1931.	Ratio of Decrease in Proportion from 1921 to 1931 to Proportion in 1921.	Decrease greater than, equal to or less than One-Twentieth of Proportion in 1931.
	1921.	1931.			
Prince Edward Island	·01008426	·00848412	·00160014	·1587	greater
Nova Scotia	·05961197	·04942243	·01018954	·1709	greater
New Brunswick	·04413965	·03933963	·00480002	·1087	greater
Ontario	·33384627	·33070769	·00313858	·0094	less
Manitoba	·06943053	·06747166	·00195887	·0282	less

The above table shows that no reduction should take place in the representation of Ontario or Manitoba, since the proportion which the number of the population of these provinces bore to the number of the aggregate population of Canada at the readjustment of the number of members for the province based on the census of 1921 is ascertained at the census of 1931 to be diminished by less than one-twentieth part.

Nova Scotia.—The proportion for Nova Scotia having diminished by more than one-twentieth part, the provisions of subsection 4 of section 51 do not apply and the representation of Nova Scotia should be reduced, in accordance with the provisions of section 51, subsections 2 and 3 of the Act, by two members.

Prince Edward Island.—Prince Edward Island would only have two members on the strict basis of population but its representation remains unchanged at 4 under the B.N.A. Act of 1915 referred to above.

New Brunswick.—The representation of New Brunswick if fixed by the unit of representation (44,186) would be reduced from 11 to 9; but as the B.N.A. Act of 1915 provided that "a province shall always be entitled to a number of members in the House of Commons, not less than the number of senators representing such province", the representation of New Brunswick will be 10 instead of 9, corresponding with the number of senators from that province.

Yukon.—The representation of Yukon is not determined by the B. N. A. Act, but is within the competence of Parliament to decide. In the following statement it is presumed it will continue to be represented.

The representation, therefore, to which each province is entitled as a result of redistribution based upon the 1931 census will be as follows: Prince Edward Island 4; Nova Scotia 12; New Brunswick 10; Quebec 65; Ontario 82; Manitoba 17; Saskatchewan 21; Alberta 17; British Columbia 16; Yukon 1; total 245.

Constituencies and Representatives in the Seventeenth Parliament.—A complete list of the constituencies, with their 1931 populations, the voters on the list and votes polled at the general election of July 28, 1930, together with the names and addresses of those then elected to the House of Commons of the seventeenth Parliament of Canada, will be found in Table **9**. Changes occurring at subsequent by-elections to Mar. 1, 1933, are indicated in the footnotes.

9.—Population of Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Seventeenth General Election.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	P.O. Address.
Prince Edward Island—					
(4 members)	88,038	46,985	59,519		
Kings	19,147	10,253	9,159	Macdonald, Hon. J. A.	Cardigan, P.E.I.
Prince	31,500	16,350	14,584	Maclean, A. E.	Summerside, P.E.I.
Queens	37,391	20,382	35,776[1]	McLure, W. C. S. Myers, J. H.	Charlottetown, P.E.I. Hampton, P.E.I.
Nova Scotia—					
(14 members)	512,846	275,762	268,727		
Antigonish-Guysborough	25,516	14,877	12,215	Duff, W.	Lunenburg, N.S.
Cape Breton North-Victoria	29,116	14,646	12,315	Johnstone, L. W.	Sydney Mines, N.S.
Cape Breton South	66,999	30,961	25,265	MacDonald, F.	Sydney, N.S.
Colchester	25,051	13,656	11,918	Urquhart, M. L.	Truro, N.S.
Cumberland	36,366	19,738	16,328	Smith, R. K.	Amherst, N.S.
Digby-Annapolis	34,650	19,934	16,729	Short, H. B.	Digby, N.S.
Halifax City and County	100,204	53,154	81,662[1]	Black, W. A. Quinn, F. P.	Halifax, N.S. Halifax, N.S.
Hants-Kings	43,750	24,171	21,125	Ilsley, J. L.	Kentville, N.S.
Inverness	21,055	10,847	9,656	MacDougall, I. D.	Port Hood, N.S.
Pictou	39,018	21,783	18,933	Cantley, T.	New Glasgow, N.S.
Queens-Lunenburg	42,286	24,713	19,969	Ernst, W. G.	Bridgewater, N.S.
Richmond-West Cp. Breton	15,411	9,608	7,542	MacDonald, J. A.[2]	St. Peters, N.S.
Shelburne-Yarmouth	33,424	17,674	15,070	Ralston, Hon. J. L.	Yarmouth, N.S.
New Brunswick—					
(11 members)	408,219	207,006	186,277		
Charlotte	21,337	12,627	9,757	Ganong, A. D.	St. Stephen, N.B.
Gloucester	41,914	18,204	15,276	Veniot, Hon. P. J.	Bathurst, N.B.
Kent	23,478	11,019	9,439	Arsenault, T.	Richibucto, N.B.
Northumberland	34,124	16,056	13,804	McDade, G. M.	Chatham, N.B.
Restigouche-Madawaska	54,386	23,932	19,771	Cormier, M. D.[4]	Edmundston, N.B.
Royal	31,026	17,469	14,550	Jones, Hon. G. B.[3]	Apohaqui, N.B.
Saint John-Albert	69,292	37,067	50,121[1]	MacLaren, Hon. M. Bell, T.	Saint John, N.B. Saint John, N.B.
Victoria-Carleton	35,703	18,635	14,480	Smith, B. F.	East Florenceville, N.B.
Westmorland	57,506	29,668	24,286	Price, O. B.	Moncton, N.B.
York-Sunbury	39,453	22,329	14,793	Hanson, R. B.	Fredericton, N.B.
Quebec—					
(65 members)	2,874,255	1,351,585	1,029,480		
Argenteuil	78,976	9,649	8,703	Perley, Rt. Hon. Sir Geo. H.	Ottawa, Ont.
Bagot	16,914	7,917	7,174	Dumaine, C.	Upton, Que.
Beauce	57,544	23,745	18,784	Lacroix, E.	St-George-de-Beauce, Que.
Beauharnois	25,163	11,238	9,797	Raymond, M.	Outremont, Que.
Bellechasse	21,296	9,308	7,617	Boulanger, O. L.	Quebec, Que.
Berthier-Maskinongé	35,545	17,546	14,132	Barrette, J. A.	St.-Barthélémi, Que.
Bonaventure	32,432	14,051	11,822	Marcil, Hon. C.	Ottawa, Ont.
Brome-Missisquoi	32,069	16,916	14,732	Pickel, F. H.	Sweetsburg, Que.
Chambly-Verchères	39,404	20,267	17,014	Duranleau, Hon. A.	Montreal, Que.
Champlain	50,176	22,460	19,199	Baribeau, J. L.	Ste-Geneviève-de-Bastican, Que.
Charlevoix-Saguenay	54,999	23,028	19,063	Casgrain, P. F.	Westmount, Que.
Chateauguay-Huntingdon	25,470	13,212	11,446	Moore, J. C.	Huntingdon, Que.
Chicoutimi	55,724	23,622	20,539	Dubuc, J. E. A.	Chicoutimi, Que.
Compton	31,858	15,263	13,153	Gobeil, S.	La Patrie, Que.
Dorchester	31,693	13,270	11,266	Gagnon, O.	Quebec, Que.
Drummond-Arthabaska	53,338	23,166	19,123	Girouard, W.	Arthabaska, Que.
Gaspé	45,617	19,456	16,327	Brasset, M.	Percé, Que.

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[1] Each voter could vote for two candidates. [2] Mr. J. A. MacDonald having accepted an office of emolument under the Crown, Hon. E. N. Rhodes was elected by acclamation Sept. 2, 1930. [3] Hon. G. B. Jones resigned his seat, April 12, 1932, and was re-elected, June 27, 1932. [4] Mr. Cormier died Jan. 14, 1933.

9.—Population of Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Seventeenth General Election—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	P.O. Address.
Quebec—concluded.					
Hull	49,196	22,790	18,586	Fournier, A.	Hull, Que.
Joliette	27,585	12,721	10,964	Ferland, C. E.	Joliette, Que.
Kamouraska	24,085	10,790	8,713	Bouchard, G.	Ste-Anne-de-la-Pocatière, Que.
Labelle	36,953	[1]	[1]	Bourassa, H.	Outremont, Que.
Lake St. John	50,253	19,181	16,694	Duguay, J. L.	St-Joseph-d'Alma, Que.
Laprairie-Napierville	21,091	9,152	8,345	Dupuis, V.	Laprairie, Que.
L'Assomption-Montcalm	29,188	14,061	11,299	Séguin, P. A.	L'Assomption, Que.
Laval-Two Mountains	30,434	13,733	12,345	Sauvé, Hon. A.	Saint-Eustache, Que.
Lévis	35,656	16,677	14,074	Fortin, E.	Lévis, Que.
L'Islet	19,404	8,535	6,804	Fafard, J. F.	L'Islet, Que.
Lotbinière	23,034	10,381	8,989	Verville, J. A.	St. Flavien, Que.
Matane	45,272	18,249	14,805	LaRue, J. E. H.	Amqui, Que.
Mégantic	35,492	15,889	13,461	Roberge, E.	Laurierville, Que.
Montmagny	20,239	9,405	7,550	Lavergne, A.	Quebec, Que.
Nicolet	28,673	13,680	11,487	Dubois, L.	Gentilly, Que.
Pontiac	64,155	29,732	21,918	Belec, C.	Fort Coulonge, Que.
Portneuf	39,522	18,418	15,175	Desrochers, J.	St-Raymond, Que.
Quebec-Montmorency	39,552	16,673	14,592	Dorion, C. N.	Courville, Que.
Quebec East	55,596	27,049	21,611	Lapointe, Hon. E.	Ottawa, Ont.
Quebec South	36,235	19,820	14,881	Power, C. G.	Quebec, Que.
Quebec West	52,309	23,891	20,101	Dupré, Hon. M.	Quebec, Que.
Richelieu	21,483	10,608	8,938	Cardin, Hon. P. J. A.	Sorel, Que.
Richmond-Wolfe	41,867	19,391	16,998	Laflèche, J. F.	Windsor Mills, Que.
Rimouski	33,151	13,564	11,043	Fiset, Sir E.	Rimouski, Que.
St-Hyacinthe-Rouville	39,630	20,492	16,187	Fontaine, J. T. A.	St-Hyacinthe, Que.
St. Johns-Iberville	27,051	14,346	12,099	Rhéaume, M.	St. Johns, Que.
Shefford	28,262	14,013	12,648	Tétreault, J. E.	Granby, Que.
Sherbrooke	37,386	19,865	16,700	Howard, C. B.	Sherbrooke, Que.
Stanstead	25,118	12,998	11,351	Hackett, J. T.	Stanstead, Que.
Témiscouata	50,163	20,706	17,584	Pouliot, J. F.	Rivière-du-Loup, Que.
Terrebonne	38,611	18,392	15,517	Parent, L. E.	Ste-Agathe-des-Monts, Que.
Three Rivers-St-Maurice	69,095	32,978	26,110	Bettez, A.[2]	Three Rivers, Que.
Vaudreuil-Soulanges	21,114	10,429	8,500	Thauvette, J.	Vaudreuil, Que.
Wright	27,107	12,927	11,020	Perras, F. W.	Gracefield, Que.
Yamaska	16,820	7,926	7,068	Boucher, A.[4]	Pierreville, Que.
Montreal Island—(13 members)	1,003,868	508,062	325,495		
Cartier	48,064	25,442	12,262	Jacobs, S. W.	Montreal, Que.
Hochelaga	87,096	43,728	28,652	St-Père, E. C.	Montreal, Que.
Jacques Cartier	130,776	61,453	44,801	Laurin, J. G. P.	Montreal, Que.
Laurier-Outremont	88,579	45,968	27,310	Mercier, J. A.	Montreal, Que.
Maisonneuve	116,311	50,593	34,196	Robitaille, C[3]	Montreal, Que.
Mount Royal	93,035	48,515	26,590	White, R. S.	Montreal, Que.
St. Ann	60,696	31,256	22,770	Sullivan, J. A.	Montreal, Que.
St. Antoine	36,033	19,956	12,639	Bell, L. G.	Montreal, Que.
St. Denis	140,940	69,249	45,396	Denis, J. A.	Montreal, Que.
St. Henri	44,019	23,718	17,722	Mercier, P.	Montreal, Que.
St. James	54,903	32,776	19,721	Rinfret, Hon. F.	Montreal, Que.
St. Lawrence-St. George	37,861	19,646	10,479	Cahan, Hon. C. H.	Montreal, Que.
St. Mary	65,555	35,762	22,957	Deslauriers, H.	Montreal, Que.
Ontario—(82 members)	3,431,683	1,894,624	1,364,960		
Algoma East	37,455	17,879	14,251	Nicholson, G. B.	Chapleau, Ont.
Algoma West	38,425	17,893	13,702	Simpson, T. E.	Sault Ste. Marie, Ont.
Brant	21,202	11,538	9,497	Smoke, F.	Paris, Ont.
Brantford City	32,274	19,018	15,309	Ryerson, R. E.	Brantford, Ont.
Bruce North	20,466	12,554	11,185	Malcolm, Hon. J.	Kincardine, Ont.
Bruce South	21,820	13,339	10,602	Hall, W. A.	Walkerton, Ont.
Carleton	38,619	20,493	16,793	Garland, W. F.	Ottawa, Ont.
Dufferin-Simcoe	32,763	20,372	13,790	Rowe, W. E.	Newton Robinson, Ont.
Durham	25,782	16,338	12,068	Bowen, F. W.	Newcastle, Ont.
Elgin West	34,068	21,896	18,680	Hepburn, M. F.	St. Thomas, Ont.
Essex East	42,976	21,097	16,453	Morand, Hon. R. D.	Windsor, Ont.
Essex South	35,044	17,996	14,609	Gott, E. J.	Amherstburg, Ont.

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[1] Acclamation. [2] Mr. Bettez died Jan. 4, 1931, and Mr. Charles Bourgeois was elected Aug. 10, 1931. [3] Mr. Robitaille died Jan. 16, 1932, and Mr. Joseph Jean was elected June 27, 1932. [4] Election declared void by the Supreme Court of Canada, Dec. 23, 1932. Seat still vacant (March, 1933).

9.—Population of Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Seventeenth General Election—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	P.O. Address.
Ontario—continued.					
Essex West	83,808	43,231	27,993	Robinson, S. C.	Walkerville, Ont.
Fort William	36,040	14,412	10,861	Manion, Hon. R. J.	Fort William, Ont.
Frontenac-Addington	29,434	17,058	11,537	Spankie, W.	Wolfe Island, Ont.
Glengarry	18,666	10,615	8,948	McGillis, A.	Williamstown, Ont.
Grenville-Dundas	32,425	20,645	14,612	Casselman, A. C.	Prescott, Ont.
Grey North	30,288	18,899	15,068	Porteous, V. C.	Owen Sound, Ont.
Grey Southeast	27,411	16,912	13,028	Macphail, Agnes C.	Ceylon, Ont.
Haldimand	21.428	12,835	11,064	Senn, M. C.	Caledonia, Ont.
Halton	26,558	16,035	12,826	Anderson, R. K.	Milton, Ont.
Hamilton East	66,771	36,829	21,475	Rennie, G. S.[2]	Hamilton, Ont.
Hamilton, West	56,305	30,928	17,335	Bell, C. W.	Hamilton, Ont.
Hastings-Peterborough	27,160	14,804	10,034	Embury, A. T.	Bancroft, Ont.
Hastings South	39,327	22,563	18,548	Tummon, W. E.	Tweed, Ont.
Huron North	22,662	14,488	12,116	Spotton, Geo.	Wingham, Ont.
Huron South	22,518	14,146	12,035	McMillan, T.[3]	Seaforth, Ont.
Kenora-Rainy River	33,925	15,661	12,178	Heenan, Hon. P.	Kenora, Ont.
Kent	54,715	29,006	23,051	Rutherford, J. W.	Chatham, Ont.
Kingston City	26,180	14,569	11,164	Ross, A. E.	Kingston, Ont.
Lambton East	26,736	16,391	12,622	Sproule, J. T.	Oil Springs, Ont.
Lambton West	34,040	18,957	15,236	Gray, R. W.	Sarnia, Ont.
Lanark	32,856	20,816	16,815	Thompson, T. A.	Almonte, Ont.
Leeds	35,157	20,987	15,699	Stewart, Hon. H. A.	Brockville, Ont.
Lincoln	54,199	30,802	21,076	Chaplin, Hon. J. D.	St. Catharines, Ont.
London	59,821	37,465	23,810	White, J. F.	London, Ont.
Middlesex East	34,788	19,170	14,188	Boyes, F.	Dorchester Station, Ont.
Middlesex West	23,632	14,138	11,204	Elliott, Hon. J. C.	Strathroy, Ont.
Muskoka-Ontario	35,513	20,447	14,740	McGibbon, P.	Bracebridge, Ont.
Nipissing	70,204	32,193	23,683	Hurtubise, J. R.	Sudbury, Ont.
Norfolk-Elgin	40,727	23,134	18,902	Taylor, W. H.	Scotland, Ont.
Northumberland	30,727	18,290	16,175	Fraser, W. A.	Trenton, Ont.
Ontario	45,139	24,952	19,843	Moore, W. H.	Dunbarton, Ont.
Ottawa	106,077	61,535	97,369[1]	Chevrier, E. R. E. Ahearn, T. F.	Ottawa, Ont. Ottawa, Ont.
Oxford North	25,244	15,405	13,428	Sutherland, Hon. D. M.	Woodstock, Ont.
Oxford South	22,581	13,660	11,388	Cayley, T. M.	Norwich, Ont.
Parkdale	59,246	37,242	17,566	Spence, D.	Toronto, Ont.
Parry Sound	25,900	13,169	9,918	Arthurs, J.	Parry Sound, Ont.
Peel	28,156	17,077	13,995	Charters, S.	Brampton, Ont.
Perth North	33,822	20,249	16,610	Wright, D. M.	Stratford, Ont.
Perth South	17,570	11,099	9,428	Sanderson, F. G.	St. Marys Ont.
Peterborough West	37,042	21,575	17,608	Peck, E. A.	Peterborough, Ont.
Port Arthur-Thunder Bay	35,865	14,364	10,859	Cowan, D. J.	Port Arthur, Ont.
Prescott	24,596	12,498	8,927	Bertrand, E. O.	L'Orignal, Ont.
Prince Edward-Lennox	25,718	15,786	12,414	Weese, J. A.	Belleville, Ont.
Renfrew North	27,230	14,571	11,086	Cotnam, I. D.	Pembroke, Ont.
Renfrew South	26,986	14,534	12,595	Maloney, M. J.	Eganville, Ont.
Russell	43,831	21,807	17,591	Goulet, A.	Bourget, Ont.
Simcoe, East	36,572	19,442	15,669	Thompson, A. B.	Penetanguishene, Ont.
Simcoe North	29,224	16,125	13,791	Simpson, J. T.	Barrie, Ont.
Stormont	32,524	17,694	15.318	Shaver, F. T.	Aultsville, Ont.
Timiskaming North	58,284	24,879	16,773	Bradette, J. A.	Cochrane, Ont.
Timiskaming South	43,948	21,892	16,024	Gordon, Hon. W. A.	Haileybury, Ont.
Toronto East	68,987	40,630	19,835	Ryckman, Hon. E. B.	Toronto, Ont.
Toronto East Centre	66,341	37,971	16,514	Matthews, R. C.	Toronto, Ont.
Toronto High Park	64,088	36,245	17,661	Anderson, A. J.	Toronto, Ont.
Toronto Northeast	106,123	63,635	27,742	Baker, R. L.	Toronto, Ont.
Toronto Northwest	70,729	42,875	19,902	MacNicol, J. R.	Toronto, Ont.
Toronto Scarborough	87,656	50,372	23,321	Harris, J. H.	Toronto, Ont.
Toronto South	46,065	18,005	7,681	Geary, G. R.	Toronto, Ont.
Toronto West Centre	61,972	31,136	17,261	Factor, S.	Toronto, Ont.
Victoria	31,841	19,725	15,342	Stinson, T. H.	Lindsay, Ont.
Waterloo North	53,777	28,694	22,580	Euler, Hon. W. D.	Kitchener, Ont.
Waterloo South	36,075	20,922	13,984	Edwards, A. McKay	Galt, Ont.
Welland	82,731	41,568	28,831	Pettit, G. H.	Welland, Ont.
Wellington North	19,035	11,826	9,365	Blair, J. K.	Arthur, Ont.

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[1] Each voter could vote for two candidates. [2] Mr. G. S. Rennie died Oct. 13, 1930, and Humphrey Mitchell was elected Aug. 10, 1931. [3] Mr. T. McMillan died June 7, 1932, and William H. Golding was elected Oct. 3, 1932.

9.—Population of Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Seventeenth General Election—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	P.O. Address.
Ontario—concluded.					
Wellington South	39,129	22,515	16,818	Guthrie, Hon. H.	Guelph, Ont.
Wentworth	66,943	34,655	24,782	Wilson, G. C.	Dundas, Ont.
York North	38,607	23,801	20,583	Lennox, T. H.	Toronto, Ont.
York South	62,258	31,010	17,296	McGregor, R. H.	Toronto, Ont.
York West	124,883	62,645	32,300	Lawson, J. E.	Toronto, Ont.
Manitoba— (17 members)	700,139	328,089	235,192		
Brandon	30,483	20,438	16,451	Beaubier, D. W.	Brandon, Man.
Dauphin	37,703	16,842	13,621	Bowman, J. L.	Dauphin, Man.
Lisgar	31,891	13,217	10,200	Brown, J. L.	Pilot Mound, Man.
Macdonald	32,090	15,152	11,784	Weir, W. G.	Rosebank, Man.
Marquette	37,468	18,051	14,742	Mullins, H. A.	Winnipeg, Man.
Neepawa	27,429	13,249	10,855	Murphy, Hon. T. G.	Neepawa, Man.
Nelson	32,238	11,050	8,873	Stitt, B. M.	The Pas, Man.
Portage la Prairie	33,979	15,738	12,641	Burns, W. H.	Portage la Prairie, Man.
Provencher	32,613	11,879	7,905	Beaubien, A. L.	St. Jean Baptiste, Man.
Selkirk	44,506	19,287	14,454	Stitt, J. H.	Winnipeg, Man.
Souris	26,726	14,296	12,102	Willis, E. F.	Boissevain, Man.
Springfield	42,350	16,614	11,082	Hay, T.	Gonor, Man.
St. Boniface	43,389	20,775	13,738	Howden, J. P.	St. Boniface, Man.
Winnipeg North	63,917	24,781	14,313	Heaps, A. A.	Winnipeg, Man.
Winnipeg North Centre	45,350	22,649	10,955	Woodsworth, J. S.	Winnipeg, Man.
Winnipeg South	51,518	27,959	20,275	Rogers, Hon. R.	Winnipeg, Man.
Winnipeg South Centre	77,489	46,112	31,201	Kennedy, W. W.	Winnipeg, Man.
Saskatchewan— (21 members)	921,785	410,400	331,652		
Assiniboia	41,144	18,867	15,723	McKenzie, R.	Stoughton, Sask.
Humboldt	44,146	18,069	14,079	Totzke, A. F.	Vonda, Sask.
Kindersley	35,290	16,465	12,570	Carmichael, A. M.	Kindersley, Sask.
Last Mountain	36,507	15,215	12,946	Butcher, H.	Punnichy, Sask.
Long Lake	31,266	14,640	12,514	Cowan, W. D.	Regina, Sask.
Mackenzie	44,869	17,652	13,592	Campbell, M. N[3]	Pelly, Sask.
Maple Creek	43,903	20,799	17,449	Swanston, J. B.	Shaunavon, Sask.
Melfort	52,668	22,914	17,587	Weir, Hon. Robt.	Weldon, Sask.
Melville	39,338	16,677	14,273	Motherwell, Hon. W. R.	Abernethy, Sask.
Moose Jaw	42,334	21,825	17,704	Beynon, W. A.	Moose Jaw, Sask.
North Battleford	53,708	20,811	15,566	McIntosh, C. R.	North Battleford, Sask.
Prince Albert	50,896	20,676	17,464	Mackenzie King, Rt. Hon. W. L.	Ottawa, Ont.
Qu'Appelle	35,938	17,397	14,851	Perley, E. D.	Wolseley, Sask.
Regina	60,858	30,707	25,430	Turnbull, F. W.	Regina, Sask.
Rosetown	32,526	15,286	12,448	Loucks, W. J.	Delisle, Sask.
Saskatoon	60,636	28,850	21,566	MacMillan, F. R.	Saskatoon, Sask.
South Battleford	45,199	20,026	16,223	Vallance, J.	Onward, Sask.
Swift Current	41,717	17,775	14,010	Bothwell, C. E.	Swift Current, Sask.
Weyburn	41,684	17,523	14,474	Young, E. J.	Dummer, Sask.
Willow Bunch	48,466	22,638	18,799	Donnelly, T. F.	Kincaid, Sask.
Yorkton	38,692	15,388	12,384	McPhee, G. W.	Yorkton, Sask.
Alberta— (16 members)	731,605	304,475	201,635		
Acadia	34,896	[1]	[1]	Gardiner, R.	Excel, Alta.
Athabaska	55,298	19,617	11,989	Buckley, J. F.[2]	St. Paul, Alta.
Battle River	43,441	19,054	10,900	Spencer, H. E.	Edgerton, Alta.
Bow River	35,901	14,483	10,523	Garland, E. D.	Gleichen, Alta.
Calgary East	51,640	25,355	17,442	Stanley, G. D.	Calgary, Alta.
Calgary West	50,898	27,669	19,879	Bennett, Rt. Hon. R. B.	Calgary, Alta.
Camrose	39,806	17,462	10,970	Lucas, W. T.	Lougheed, Alta.
Edmonton East	48,865	22,466	15,007	Bury, A. U. G.	Edmonton, Alta.
Edmonton West	51,584	25,365	18,275	Stewart, Hon. C. S.	Edmonton, Alta.
Lethbridge	47,871	17,555	12,579	Stewart, J. S.	Lethbridge, Alta.
Macleod	40,336	18,844	13,093	Coote, G. G.	Nanton, Alta.
Medicine Hat	32,709	14,071	9,205	Gershaw, F. W.	Medicine Hat, Alta.
Peace River	76,778	31,741	18,732	Kennedy, D. McB.	Waterhole, Alta.

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[1] Acclamation. [2] Mr. J. F. Buckley was killed Nov. 27, 1931, and Mr. P. G. Davies was elected Mar. 31, 1932. [3] Mr. Campbell resigned Feb. 6, 1933.

9.—Population of Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Seventeenth General Election—concluded.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	P.O. Address.
Alberta—concluded.					
Red Deer	39,385	18,182	10,901	Speakman, A.	Red Deer, Alta.
Vegreville	37,442	15,001	10,137	Luchkovich, M.	Vegreville, Alta.
Wetaskiwin	44,755	17,610	12,003	Irvine, W.	Wetaskiwin, Alta.
British Columbia— (14 members)	694,263	333,326	243,631		
Cariboo	52,702	22,197	16,889	Fraser, J. A.	Quesnel, B.C.
Comox-Alberni	25,369	10,751	8,963	Neill, A. W.	Alberni, B.C.
Fraser Valley	38,507	15,802	13,385	Barber, H. J.	Chilliwack, B.C.
Kootenay East	22,566	10,834	9,212	McLean, M. D.[1]	Michel, B.C.
Kootenay West	39,943	17,911	14,150	Esling, W. K.	Rossland, B.C.
Nanaimo	55,524	28,593	20,598	Dickie, C. H.	Duncan, B.C.
New Westminster	69,294	32,647	23,970	Reid, T.	Newton (Surrey Municipality), B.C.
Skeena	30,358	11,770	9,733	Hanson, O.	Prince Rupert, B.C.
Vancouver-Burrard	82,519	45,220	31,878	Hanbury, W.	Vancouver, B.C.
Vancouver Centre	75,234	33,483	22,244	Mackenzie, Hon. I.	Vancouver, B.C.
Vancouver North	32,972	16,737	12,661	Munn, A. E.	Vancouver, B.C.
Vancouver South	89,556	47,226	31,728	MacInnis, A.	Vancouver, B.C.
Victoria	39,082	22,151	14,740	Plunkett, D'A. B.	Victoria, B.C.
Yale	40,637	18,004	13,480	Stirling, G.	Kelowna, B.C.
Yukon— (1 member).					
Yukon	4,230	1,719	1,408	Black, G.	Dawson, Yukon.

[1] Mr. M. D. McLean having accepted an office of emolument under the Crown, Hon. H. H. Stevens was elected by acclamation, Aug. 25, 1930.

Subsection 5.—The Dominion Franchise.[1]

It was provided by the B.N.A. Act, 1867, that, until otherwise directed by Parliament, elections to the House of Commons should be governed by the electoral laws of the several provinces. The qualifications of electors throughout the Dominion consequently remained the same for both Dominion and provincial elections until, in 1885, Parliament legislated on the subject by passing the Electoral Franchise Act (1885, c. 40). That Act defined a uniform qualification for voters throughout Canada for Dominion purposes, the basis of this new franchise being the ownership or occupation of land of a specified value, although the sons of owners, and particularly farmers' sons, were given the right to vote on special conditions; each province, of course, continued separately to define the qualifications of voters at provincial elections. This Dominion franchise remained in force for thirteen years, but between 1898 and 1920, under the Franchise Act of the former year (1898, c. 14), the provincial franchises were again made applicable at Dominion elections, except that on the constitution of the provinces of Alberta and Saskatchewan it was provided that manhood suffrage, which had already been adopted for the Northwest Territories under an Act to amend the N.W.T. Act (1895, c. 16), should continue in force for Dominion purposes independently of any action that might be taken by the newly elected Legislatures of these two provinces (R.S.C. 1906, c. 6, ss. 31-65). In the other provinces the rules as to the qualifications of voters varied from time to time. In Manitoba manhood suffrage had been adopted in 1888 (1888, c. 2), and the franchise was extended to women on the same terms as to men in 1916 (1916, c. 36). Alberta and Saskatchewan, on their establishment as provinces, continued the previously existing manhood suffrage and both extended the franchise to women on the same terms as to men in 1916 (Alta. 1916, c. 5; Sask. 1916, c. 37). British Columbia adopted manhood suffrage in 1904 (1903-1904, c. 7), Ontario in 1907 (7 Edw. VII, c. 5), and New Brunswick in 1916 (6 Geo. V, c. 16); in British Columbia (1917, c. 23) and in Ontario (7 Geo. V, c. 5), the franchise was extended equally to women in 1917, and in New Brunswick this was done in 1919 (9 Geo. V, c. 63). In Quebec and Prince Edward Island the provincial franchises throughout the period in question were not so wide; in neither were women admitted to vote and certain property or other special qualifications were required in each. A property qualification was also required in Nova Scotia until 1920 (10-11 Geo. V, c. 49), but between 1918 and 1920 men and women had voted on equal terms (9 Geo. V, c. 3). The adoption of the provincial franchise laws for Dominion purposes was temporarily modified by the War Times Elections Act (1917, c. 39), which admitted certain near female relatives of serving soldiers and sailors to vote at Dominion elections, and three years later, on the adoption of a New Dominion Elections Act (1920, c. 46), the provincial franchises were again wholly abandoned and a new electoral qualification was established for Dominion elections throughout Canada. Subject to a modification of the usual rules as to changes of nationality, which was amended in 1921 (1921, c. 29, s. 3) and repealed in 1922 (1922, c. 20, s. 1), the right to vote was conferred by the new Act upon all British subjects, male and female, of 21 years and upwards, who had resided in Canada for a year, and for two months in the electoral district in which they desired to vote, this last restriction having been removed two years later (1922, c. 20), so far it as applied to general elections. The only adult British subjects who now are denied the right to vote are prisoners undergoing punishment, lunatics in institutions, Indians within the meaning of the Indian Act and not having served in the Great War, judges appointed by the Dominion Government, persons paid for work on behalf of a candidate in relation to the election, persons expressly disfranchised for corrupt or illegal practices and certain persons who by reason of their race are not permitted, under the law of the province in which they live, to vote at a provincial election in that province. The effect of this last exception is to exclude from the franchise only such Chinese, Japanese and East Indians as reside in British Columbia and did not serve in the Canadian forces during the Great War, and such Chinese as reside in the province of Saskatchewan and did not so serve. (See also R.S.C. 1927, c. 53, The Dominion Elections Act, as amended by c. 40 of 1929 and c. 16 of 1930.)

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[1] Contributed by Oliver Mowat Biggar, K.C., formerly Chief Electoral Officer.

The Use of the Franchise.—The number of voters on the lists and the number of votes polled at the general elections of 1921, 1925, 1926 and 1930, are given in Table **10**.

10.—Number of Voters and Votes Polled in the General Elections of 1921, 1925, 1926 and 1930.

Province.	Number of Voters on the List.				Number of Votes Polled.			
	1921.	1925.	1926.	1930.	1921.	1925.	1926.	1930.
P. E. Island	46,879	45,454	46,208	46,985	52,556[1]	49,558[1]	55,569[1]	59,519[1]
Nova Scotia	294,473	277,073	273,712	275,762	260,860[2]	222,883[2]	229,846[2]	268,727[2]
New Brunswick	204,575	211,190	210,028	207,006	156,263[3]	152,652[3]	162,777[3]	186,277[3]
Quebec	1,056,792	1,124,998	1,133,633	1,351,585	779,951	805,492	809,295	1,029,480
Ontario	1,738,020	1,821,906	1,847,512	1,894,624	1,139,635[4]	1,223,027[4]	1,226,267[4]	1,364,960[4]
Manitoba	255,143	250,505	257,244[5]	328,089	173,941	171,124	198,028[5]	235,192
Saskatchewan	333,613	346,791	353,471	410,400	225,236	197,246	246,460	331,652
Alberta	273,706	283,529	279,463	304,475	173,824	161,423	157,993	201,635
British Columbia	230,451	244,352	262,262	333,326	156,012	183,748	185,345	243,631
Yukon	1,658	1,621	1,848	1,719	1,388	1,259	1,482	1,408
Totals	**4,435,310**	**4,607,419**	**4,665,381**[5]	**5,153,971**[6]	**3,119,306**	**3,168,412**	**3,273,062**[5]	**3,922,481**[6]

[1] Each voter in the double member constituency of Queens County, P.E.I., had two votes; in 1930, 20,382 voters on the list cast 35,776 votes. [2] Each voter in the double member constituency of Halifax, N.S., had two votes; in 1930, 53,154 voters on the list cast 81,662 votes. [3] Each voter in the double member constituency of Saint John-Albert, N.B., had two votes; in 1930, 37,067 voters on the list cast 50,121 votes. [4] Each voter in the double member constituency of Ottawa, Ont., had two votes: in 1930, 61,535 voters on the list cast 97,369 votes. [5] Not including one electoral district in which the return was by acclamation. [6] Not including two electoral districts in which the returns were by acclamation.

Section 2.—Provincial Governments.

Table **11** gives the names and areas, as in 1933, of the several provinces, territories and provisional districts of the Dominion, together with the dates of their creation or admission into the Confederation and the legislative process by which this was effected.

11.—Provinces and Territories of Canada, with Present Areas, Dates of Admission to Confederation and Legislative Process by which Admission was Effected.

Province, Territory or District.	Date of Admission or Creation.	Legislative Process.	Present Area (square miles). Land.	Present Area (square miles). Fresh Water.	Present Area (square miles). Total.
Ontario	July 1, 1867	Act of Imperial Parliament — The British North America Act, 1867 (30-31 Vict., c. 3), and Imperial Order in Council of May 22, 1867.	363,282	49,300	412,582[1]
Quebec	“ 1, 1867		523,534	71,000[2]	594,534
Nova Scotia	“ 1, 1867		20,743	325	21,068
New Brunswick	“ 1, 1867		27,710	275	27,985
Manitoba	“ 15, 1870	Manitoba Act, 1870 (33 Vict., c. 3) and Imperial Order in Council, June 23, 1870	219,723	26,789	246,512[3]
British Columbia	“ 20, 1871	Imperial Order in Council, May 16, 1871	349,970	5,885	355,855
P. E. Island	“ 1, 1873	Imperial Order in Council, June 26, 1873	2,184	-	2,184
Saskatchewan	Sept. 1, 1905	Saskatchewan Act, 1905 (4-5 Edw. VII, c. 42)	237,975	13,725	251,700[4]
Alberta	“ 1, 1905	Alberta Act, 1905 (4-5 Edw. VII, c. 3).	248,800	6,485	255,285[4]
Yukon	June 13, 1898	Yukon Territory Act, 1898 (61 Vict., c. 6)	205,346	1,730	207,076
Mackenzie	Jan. 1, 1920	Order in Council, Mar. 16, 1918	493,225	34,265	527,490[5]
Keewatin	“ 1, 1920		218,460	9,700	228,160[5]
Franklin	“ 1, 1920		546,532	7,500	554,032[5]
Totals			**3,457,484**	**226,979**	**3,634,463**

[1] The area of Ontario was extended by the Ontario Boundaries Extension Act, 1912 (2 Geo. V, c. 40).

[2] Extended by Quebec Boundaries Extension Act, 1912 (2 Geo. V, c. 45), and diminished in consequence of the award of the Judicial Committee of the British Privy Council (Mar. 1, 1927), whereby some 112,400 square miles of territory, formerly considered as part of Quebec, were assigned to Newfoundland.

[3] Extended by Extension of Boundaries of Manitoba Act, 1881, and Manitoba Boundaries Extension Act, 1912 (2 Geo. V, c. 32).

[4] Alberta and Saskatchewan now cover approximately the area formerly comprised in the districts of Assiniboia, Athabaska, Alberta and Saskatchewan, established May 17, 1882, by minute of Canadian P.C., concurred in by Dominion Parliament and Order in Council of Oct. 2, 1895.

[5] By an Order in Council of June 23, 1870, Rupert's Land, acquired under the Rupert's Land Acts of 1867 and 1868, and the undefined Northern Territories were admitted in to the Confederation. The original Northwest Territories, mentioned in the Manitoba Act, 1870, were established by the Northwest Territories Act, 1880 (43 Vict., c. 25), the district of Keewatin having been previously defined by an Act of the Dominion Parliament (39 Vict., c. 21). The provisional districts of Yukon, Mackenzie, Franklin and Ungava were defined in an Order in Council of Oct. 2, 1895, their boundaries being changed by Order in Council of Dec. 18, 1897. By Order in Council of July 24, 1905, the area of Keewatin, not included in the Northwest Territories, was annexed to the latter from Sept. 1, 1905. By the Extension of Boundaries Act, 1912, Ungava was made a part of the province of Quebec, and the remaining area of the Northwest Territories south of 60° N. latitude was divided between Manitoba and Ontario.

In each of the provinces the King is represented by a Lieutenant-Governor appointed by the Governor General in Council, and governing with the advice and assistance of his Ministry or Executive Council, which is responsible to the Legislature and resigns office when it ceases to enjoy the confidence of that body. The Legislatures of all the provinces with the exception of Quebec are now unicameral,[1] consisting of a Legislative Assembly elected by the people. In Quebec there is a Legislative Council as well as a Legislative Assembly. For detailed description of the Provincial Governments, the reader is referred to pp. 101-115 of the 1922-23 edition of the Year Book.

The Lieutenant-Governors of the provinces, together with the names of the Ministers of the present administrations, are given in Table **12**. Details regarding Provincial Legislatures and Ministries from Confederation to 1924 were given on pp. 75-84 of the 1924 Year Book.

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[1] The Legislative Council of Nova Scotia ceased to exist in 1928.

12.—Lieutenant-Governors of Provinces, 1867-1932, and Present Ministries.

NOTE.—The Lieutenant-Governor of a province is styled "His Honour" and is also styled "Honourable" throughout his life.

PRINCE EDWARD ISLAND.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
W. C. F. Robinson	June 10, 1873	D. A. McKinnon	Oct. 3, 1904
Sir Robert Hodgson	Nov. 22, 1873	Benjamin Rogers	June 1, 1910
Thomas H. Haviland	July 14, 1879	A. C. Macdonald	June 2, 1915
Andrew Archibald Macdonald	Aug. 1, 1884	Murdock McKinnon	Sept. 3, 1919
Jedediah S. Carvell	Sept. 21, 1889	Frank R. Heartz	Sept. 8, 1924
Geo. W. Howlan	Feb. 21, 1894	Charles Dalton	Nov. 29, 1930
P. A. McIntyre	May 13, 1899		

SEVENTEENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, Attorney and Advocate General and Provincial Secretary-Treasurer	Hon. James D. Stewart, K.C.	Aug. 29, 1931
Minister of Public Works and Highways	Hon. G. Shelton Sharp	Aug. 29, 1931
Minister of Education and Public Health	Hon. William J. P. MacMillan, M.D.	Aug. 29, 1931
Minister of Agriculture	Hon. Thomas McNutt	Nov. 28, 1932
Minister without Portfolio	Hon. H. Francis McPhee, B.A.	Aug. 29, 1931
Minister without Portfolio	Hon. Adrian F. Arsenault, B.A.	Aug. 29, 1931
Minister without Portfolio	Hon. Harry D. MacLean	Aug. 29, 1931
Minister without Portfolio	Hon. Walter G. McKenzie	Aug. 29, 1931
Minister without Portfolio	Hon. Matthew W. Wood	Aug. 29, 1931

NOVA SCOTIA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Lieut.-Gen. Sir. W. F. Williams	July 1, 1867	Alfred G. Jones	Aug. 7, 1900
Major-Gen. Sir C. Hastings Doyle	Oct. 18, 1867	Duncan C. Fraser	Mar. 27, 1906
Lieut-.Gen. Sir C. Hastings Doyle	Jan. 31, 1868[2]	James D. MacGregor	Oct. 18, 1910
Sir E. Kenny (acting)	May 31, 1870	David MacKeen	Oct. 19, 1915
Joseph Howe	May 1, 1873	McCallum Grant	Nov. 29, 1916
Sir A. G. Archibald	July 4, 1873	McCallum Grant	Mar. 21, 1922[2]
Matthew Henry Richey	July 4, 1883	J. Robson Douglas	Jan. 23, 1925
A. W. McLelan	July 9, 1888	James C. Tory	Sept. 24, 1925
Sir Malachy Bowes Daly	July 11, 1890	Frank Stanfield	Dec. 2, 1930
Sir Malachy Bowes Daly	July 29, 1895[2]	Walter H. Covert	Oct. 5, 1931

[2] Second term.

ELEVENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier and President of Council	Col. the Hon. G. S. Harrington	Aug. 11, 1930
Minister of Public Works and Mines	Col. the Hon. G. S. Harrington	Aug. 11, 1930
Attorney-General	Hon. John Doull	Oct. 9, 1931
Provincial Secretary	Hon. J. F. Fraser	Oct. 9, 1931
Minister of Agriculture	Hon. O. P. Goucher	Aug. 11, 1930
Minister of Highways	Hon. P. C. Black	Aug. 11, 1930
Minister of Public Health	Hon. Geo. H. Murphy, M.D., C.M.	Aug. 11, 1930
Minister without Portfolio	Hon. Albert Parsons	Aug. 11, 1930
Minister without Portfolio	Hon. Joseph Macdonald	Oct. 9, 1931

12.—Lieutenant-Governors of Provinces, 1867-1932, and Present Ministries—continued.

NEW BRUNSWICK.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-Gen. Sir C. Hastings Doyle.	July 1, 1867	A. R. McClelan	Dec. 9, 1896
Col. F. P. Harding	Oct. 18, 1867	Jabez B. Snowball	Feb. 5, 1902
L. A. Wilmot	July 14, 1868	L. J. Tweedie	Mar. 2, 1907
Samuel Leonard Tilley	Nov. 5, 1873	Josiah Wood	Mar. 6, 1912
E. Baron Chandler	July 16, 1878	G. W. Ganong	June 29, 1916
Robert Duncan Wilmot	Feb. 11, 1880	William Pugsley	Nov. 6, 1917
Sir Samuel Leonard Tilley	Oct. 31, 1885	William F. Todd	Feb. 24, 1923
John Boyd	Sept. 21, 1893	Major-Gen. Hugh H. McLean	Dec. 28, 1928
John A. Fraser	Dec. 20, 1893		

SEVENTEENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier and Attorney-General	Hon. C. D. Richards	May 20, 1931
President of Council	Hon. W. H. Harrison	May 20, 1931
Minister of Public Works	Hon. D. A. Stewart	Sept. 14, 1925
Provincial Secretary-Treasurer	Hon. A. J. Leger	Sept. 14, 1925
Minister of Lands and Mines	Hon. L. P. D. Tilley	May 20, 1931
Minister of Agriculture	Hon. Lewis Smith	Sept. 14, 1925
Minister of Health	Hon. H. I. Taylor	Sept. 14, 1925
Minister without Portfolio	Hon. E. A. Reilly	Sept. 14, 1925

QUEBEC.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Sir N. F. Belleau	July 1, 1867	Sir L. A. Jetté	Feb. 2, 1903[1]
Sir N. F. Belleau	Jan. 31, 1868[1]	Sir Charles A. P. Pelletier	Sept. 4, 1908
Réné Edouard Caron	Feb. 11, 1873	Sir François Langelier	May 5, 1911
Luc Letellier de St-Just	Dec. 15, 1876	Sir Pierre Evariste Leblanc	Feb. 9, 1915
Theodore Robitaille	July 26, 1879	Right Hon. Sir Charles Fitzpatrick	Oct. 21, 1918
L. F. R. Masson	Nov. 7, 1884	L. P. Brodeur	Oct. 31, 1923
A. R. Angers	Oct. 24, 1887	N. Perodeau	Jan. 8, 1924
Sir J. A. Chapleau	Dec. 5, 1892	Sir Lomer Gouin	Jan. 10, 1929
L. A. Jetté	Feb. 2, 1898	H. G. Carroll	April 2, 1929

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[1] Second term.

EIGHTEENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, Attorney-General, Minister of Municipal Affairs and Treasurer	Hon. L. A. Taschereau	July 9, 1920
Minister of Agriculture	Hon. A. Godbout	Nov. 27, 1930
Minister of Lands and Forests	Hon. H. Mercier	July 9, 1920
Minister of Public Works	Hon. J. N. Francœur	June 15, 1930
Minister of Colonization, Game and Fisheries	Hon. H. La Ferté	April 24, 1929
Provincial Secretary and Registrar	Hon. A. David	July 9, 1920
Minister of Roads and Mines	Hon. J. Ed. Perrault	April 24, 1929
Minister of Labour	Hon. C.-A. Arcand	Oct. 28, 1931
Minister without Portfolio	Hon. E. Moreau	Sept. 27, 1921
Minister without Portfolio	Hon. L. Lapierre	June 4, 1924
Minister without Portfolio	Hon. J. H. Dillon	Jan. 10, 1927
Minister without Portfolio	Hon. G. Bryson	Oct. 28, 1931

12.—Lieutenant-Governors of Provinces, 1867-1932, and Present Ministries—continued.

ONTARIO.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-General H. W. Stisted	July 1, 1867	Sir Oliver Mowat	Nov. 18, 1897
W. P. Howland	July 14, 1868	Sir William Mortimer Clark	April 20, 1903
John W. Crawford	Nov. 5, 1873	Sir John M. Gibson	Sept. 22, 1908
D. A. Macdonald	May 18, 1875	Lt.-Col. Sir John S. Hendrie	Sept. 26, 1914
John Beverly Robinson	June 30, 1880	Lionel H. Clarke	Nov. 27, 1919
Sir Alexander Campbell	Feb. 8, 1887	Col. Henry Cockshutt	Sept. 10, 1921
Sir George A. Kirkpatrick	May 30, 1892	William Donald Ross	Dec. 30, 1926
		Col. Herbert Alexander Bruce	Oct. 25, 1932

TENTH MINISTRY.

Office.	Name.	Date of Appointment.
Prime Minister and Minister of Education	Hon. George S. Henry	Dec. 16, 1930
Minister of Highways	Hon. Leopold Macaulay	July 31, 1931
Attorney-General	Hon. William H. Price	Dec. 16, 1930
Provincial Secretary and Registrar	Hon. George H. Challies	July 31, 1931
Provincial Treasurer	Hon. Edward A. Dunlop	Dec. 16, 1930
Minister of Mines	Hon. Charles McCrea	Dec. 16, 1930
Minister of Public Works and Labour	Hon. J. D. Monteith	Dec. 16, 1930
Minister of Lands and Forests	Hon. Wm. Finlayson	Dec. 16, 1930
Minister of Public Health	Hon. John M. Robb	Dec. 16, 1930
Minister of Agriculture	Hon. Thomas L. Kennedy	Dec. 16, 1930
Minister of Public Welfare	Hon. William G. Martin	Dec. 16, 1930
Minister without Portfolio	Hon. John R. Cooke	Dec. 16, 1930
Minister without Portfolio	Hon. Paul Poisson	Dec. 23, 1930
Minister without Portfolio	Hon. Henry C. Scholfield	Dec. 23, 1930

MANITOBA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald	May 20, 1870	Sir D. H. McMillan	Oct. 16, 1900
Francis Goodschall Johnson	April 9, 1872	Sir D. H. McMillan	May 11, 1906[1]
Alexander Morris	Dec. 2, 1872	Sir D. C. Cameron	Aug. 1, 1911
Joseph Ed. Cauchon	Dec. 2, 1877	Sir James A. M. Aikins	Aug. 3, 1916
James C. Aikins	Sept. 22, 1882	Sir James A. M. Aikins	Aug. 7, 1921[1]
J. C. Schultz	July 1, 1888	Theodore A. Burrows	Oct. 9, 1926
J. C. Patterson	Sept. 2, 1895	J. D. McGregor	Jan. 25, 1929

[1] Second term.

TWELFTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of the Council	Hon. John Bracken	Aug. 8, 1922 Jan. 12, 1925
Attorney-General and Minister of Telephones and Telegraphs	Hon. W. J. Major, K.C.	April 29, 1927
Minister of Public Works and Labour	Hon. W. R. Clubb	Aug. 8, 1922
Municipal Commissioner, Provincial Secretary and Railway Commissioner	Hon. D. L. McLeod	Aug. 8, 1922
Minister of Agriculture and Immigration	Hon. D. G. McKenzie	May 27, 1932
Minister of Education	Hon. R. A. Hoey	April 21, 1927
Acting Minister of Health and Public Welfare	Hon. R. A. Hoey	Oct. 14, 1932
Minister of Mines and Natural Resources	Hon. J. S. McDiarmid	May 27, 1932
Provincial Treasurer	Hon. E. A. McPherson	May 27, 1932

12.—Lieutenant-Governors of Provinces, 1867-1932, and Present Ministries—continued.

SASKATCHEWAN.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. E. Forget	Sept. 1, 1905	H. W. Newlands	Feb. 17, 1921
Geo. W. Brown	Oct. 5, 1910	H. W. Newlands	Feb. 22, 1926[1]
Sir Richard Stuart Lake	Oct. 6, 1915	Lieut.-Col. H. E. Monroe, O.B.E.	Mar. 31, 1931

[1] Second term.

FIFTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of Council, Minister of Education and Minister of Natural Resources	Hon. J. T. M. Anderson, M.A., LL.B., D. Pæd	Sept. 9, 1929
Minister of Municipal Affairs and Minister in Charge of the King's Printer's Office and Bureau of Publications, Loan and Trust Companies Act	Hon. Howard McConnell, B.A., LL.B., K.C	Sept. 9, 1929
Attorney-General	Hon. M. A. MacPherson, B.A., LL.B., K.C	Sept. 9, 1929
Provincial Treasurer		Nov. 2, 1931
Minister of Public Works, Minister of Telephones and Telegraphs, Minister in charge of Fire Prevention Act, Prairie and Forest Fires Act, Insurance Act	Hon. J. F. Bryant, M.A., LL.B., K.C	Sept. 9, 1929
Minister of Public Health and Minister in charge of the Child Welfare Act	Hon. F. D. Munroe, M.D	Sept. 9, 1929
Provincial Secretary, Minister of Railways, Labour and Industries	Hon. J. A. Merkley	Sept. 9, 1929
Minister of Agriculture	Hon. W. C. Buckle	Sept. 9, 1929
Minister of Highways	Hon. A. C. Stewart, LL.B., K.C	Sept. 9, 1929
Minister without Portfolio	Hon. Reginald Stipe, M.D	Sept. 9, 1929
Minister without Portfolio	Hon. W. W. Smith	Sept. 9, 1929

ALBERTA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
George H. V. Bulyea	Sept. 1, 1905	Robert George Brett	Oct. 20, 1920[1]
George H. V. Bulyea	Oct. 5, 1910[1]	William Egbert	Oct. 20, 1925
Robert George Brett	Oct. 6, 1915	William L. Walsh	April 24, 1931

[1] Second term.

FIFTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier	Hon. J. E. Brownlee	Nov. 23, 1925
Provincial Secretary		June 5, 1926
Attorney-General	Hon. J. F. Lymburn	June 5, 1926
Provincial Treasurer	Hon. R. G. Reid	Nov. 23, 1925[1]
Minister of Lands and Mines		Oct. 1, 1930
Minister of Municipal Affairs		Nov. 23, 1925
Minister of Agriculture	Hon. Geo. Hoadley	Nov. 23, 1925[2]
Minister of Public Health		Nov. 23, 1925[1]
Minister of Railways and Telephones	Hon. Geo. Hoadley (Acting)	[3]
Minister of Public Works	Hon. O. L. McPherson	Dec. 31, 1926
Minister of Education	Hon. Perrin Baker	Nov. 23, 1925[2]
Minister without Portfolio	Hon. Irene Parlby	Nov. 23, 1925[2]

[1] First appointed in the Hon. H. Greenfield's Ministry on Nov. 3, 1923. [2] First appointed in the Hon. H. Greenfield's Ministry on Aug. 13, 1921. [3] Replaced Hon. V. W. Smith, deceased, July 19, 1932.

12.—Lieutenant-Governors of Provinces, 1867-1932, and Present Ministries—concluded.

BRITISH COLUMBIA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
J. W. Trutch	July 20, 1871	James Dunsmuir	May 11, 1906
Albert Norton Richards	July 20, 1876	T. W. Paterson	Dec. 3, 1909
Clement F. Cornwall	July 20, 1881	Sir Frank S. Barnard	Dec. 5, 1914
Hugh Nelson	Feb. 8, 1887	Col. Edward G. Prior	Dec. 9, 1919
Edgar Dewdney	Nov. 1, 1892	Walter C. Nichol	Dec. 24, 1920
Thomas R. McInnes	Nov. 18, 1897	R. Randolph Bruce	Jan. 21, 1926
Sir Henry G. Joly de Lotbinière	June 21, 1900	J. W. Fordham Johnson	Aug. 1, 1931

TWENTY-FIRST MINISTRY.

Office.	Name.	Date of Appointment.
Premier and Minister of Railways	Hon. S. F. Tolmie	Aug. 21, 1928
Provincial Secretary and Commissioner of Fisheries	Hon. S. L. Howe	Aug. 21, 1928
Attorney-General	Hon. R. H. Pooley, K.C.	Aug. 21, 1928
Minister of Lands	Hon. N. S. Lougheed	Oct. 29, 1930
Minister of Finance and Minister of Industries	Hon. J. W. Jones	Oct. 29, 1930
Minister of Agriculture	Hon. William Atkinson	Aug. 21, 1928
Minister of Mines and Minister of Labour	Hon. W. A. McKenzie	Aug. 21, 1928
Minister of Public Works	Hon. R. W. Bruhn	Oct. 29, 1930
Minister of Education	Hon. J. Hinchliffe	Aug. 21, 1928
President of the Council	Hon. W. C. Shelly	Oct. 29, 1930
Minister without Portfolio	Hon. R. L. Maitland, K.C.	Aug. 21, 1928

THE TERRITORIES.

NOTE.—In 1888 the districts of Alberta, Assiniboia, Athabaska and Saskatchewan, then called the Northwest Territories, with their capital at Regina, were given local responsible government, and the old Northwest Council was replaced by the Northwest Legislature, which existed until Aug. 31, 1905. When the area included in these districts was formed into the provinces of Alberta and Saskatchewan, on Sept. 1, 1905, these provinces were given systems of government similar to the other provinces of the Dominion. The remaining areas (Yukon and the provisional districts of Franklin, Keewatin and Mackenzie) are now administered by the North West Territories and Yukon Division, Dominion Lands Administration, Department of the Interior. The Deputy Minister of the Department is, *ex officio*, the Commissioner of the Northwest Territories which comprises the three provisional districts.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald	May 10, 1870	Joseph Royal	July 1, 1888
Francis Goodschall Johnson	April 9, 1872	C. H. Mackintosh	Oct. 31, 1893
Alexander Morris	Dec. 2, 1872	M. C. Cameron	May 30, 1898
David Laird	Oct. 7, 1876	A. E. Forget	Oct. 11, 1898
Edgar Dewdney	Dec. 3, 1881	A. E. Forget	Mar. 30, 1904[1]

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[1] Second term.

PART IV.—REPRESENTATIVES IN OTHER COUNTRIES.

Section 1.—Representatives within the Empire.

The policy of the early North American colonies, of maintaining in London accredited representatives for business and diplomatic purposes, was recognized in the eighteenth century as being a more satisfactory means of communication with the British Government than that provided by occasional official visits or by correspondence. Edmund Burke, the noted British statesman, held the position of agent for the colony of New York for some years following 1771. Of the Canadian colonies, Nova Scotia was the first to adopt this plan, its Legislature having appointed an agent in London in 1761. New Brunswick was similarly represented in 1786, Upper Canada as early as 1794, Lower Canada in 1812 and British Columbia in 1857. For some years after 1845, several of the colonies were represented in London by Crown agents, appointed by the Secretary of State, and paid by the colonies themselves. This system, however, was of but short duration.

The older provinces of Quebec, Ontario and British Columbia still adhere to the practice of former days and are represented in London by Agents-General, as is also the province of Alberta. These officials are appointed by the Legislatures of the provinces under general authority given in the British North America Act and act for their Governments in capacities very similar to that of the High Commissioner, with the exception, perhaps, that their duties have tended to become of a business rather than a diplomatic nature.

The High Commissioner for Canada.—With the federation of the provinces of British North America in 1867, a new political entity which could not avail itself of the services of the provincial agents was brought into existence. To supplement the ordinary method of communication between the Canadian and British Governments (which at that time was by correspondence between the Governor General and the Secretary of State for the Colonies, and is now between the Secretary of State for External Affairs of Canada and the Secretary of State for Dominion Affairs in London), the position of High Commissioner for Canada was created in 1880 (see R.S.C. 1927, c. 92). The duties of the office are defined in the Act as follows:—

> "The High Commissioner shall—
>
> "(a) act as representative and resident agent of Canada in Great Britain and in that capacity, execute such powers and perform such duties as are, from time to time, conferred upon and assigned to him by the Governor in Council;
>
> "(b) take the charge, supervision and control of the immigration offices and agencies in Great Britain, under the Minister of Immigration and Colonization;
>
> "(c) carry out such instructions as he, from time to time, receives from the Governor in Council respecting the commercial, financial and general interests of Canada in Great Britain and elsewhere".

Sir Alexander Galt was the first Canadian High Commissioner, holding office from May 11, 1880, until May, 1883; in 1884 he was succeeded by Sir Charles Tupper. Lord Strathcona and Mount Royal was appointed in 1896. Sir George H. Perley took charge of the High Commissioner's Office in 1914 but was appointed High Commissioner only on Oct. 12, 1917. The Hon. P. C. Larkin was appointed in February, 1922, and after his decease (Feb. 3, 1930) the Hon. G. Howard Ferguson was appointed on Nov. 28, 1930. The office of the High Commissioner for Canada is in the Canadian Building, Trafalgar Square, London, S.W. 1.

His Majesty's Government in Great Britain appointed in April, 1928, a High Commissioner for Great Britain in Canada, Sir William H. Clark, who resides in Ottawa, and whose position corresponds to that of the High Commissioner for Canada in Great Britain. This appointment was made in consequence of discussions at the Imperial Conference of 1926. The relevant passage in the report of the Inter-Imperial Relations Committee runs as follows:—

"A special aspect of the question of consultation which we considered was that concerning the representation of Great Britain in the Dominions. By reason of his constitutional position, as explained in section IV (b) of this report, the Governor General is no longer the representative of His Majesty's Government in Great Britain. There is no one therefore in the Dominion capitals in a position to represent with authority the views of His Majesty's Government in Great Britain.

"We summed up our conclusions in the following resolution which is submitted for the consideration of the Conference:—

> " 'The Governments represented at the Imperial Conference are impressed with the desirability of developing a system of personal contact, both in London and in the Dominion capitals, to supplement the present system of intercommunication and the reciprocal supply of information on affairs requiring joint consideration. The manner in which any new system is to be worked out is a matter for consideration and settlement between His Majesty's Governments in Great Britain and the Dominions, with due regard to the circumstances of each particular part of the Empire, it being understood that any new arrangements should be supplementary to, and not in replacement of, the system of direct communication from Government to Government and the special arrangements which have been in force since 1918 for communications between Prime Ministers.' ".

Section 2.—Representatives outside the Empire.

The Canadian Minister to the United States.— For many years the diplomatic business between Canada and the United States has been steadily increasing, as the natural result of the proximity of the two countries and the closeness of the business relationships between their citizens. Before the Great War a former British Ambassador at Washington, Lord Bryce, said that between two-thirds and three-quarters of the work of the British Embassy in the United States was occasioned by Canadian affairs.

In January, 1918, a temporary Canadian War Mission was established at Washington under the chairmanship of Mr. Lloyd Harris, and was maintained for some years after the close of the War. Though not a formal diplomatic mission, its duties extended to questions usually dealt with through diplomatic channels. After the retirement of this mission Canada was represented in Washington by Mr. M. M. Mahoney, who acted as agent of the Department of External Affairs, and, through the courtesy of the British Government, occupied an office at the British Embassy.

In 1920, following discussions between the British and Canadian Governments, it was announced that agreement had been reached upon the appointment of a Canadian Minister at Washington, who would act for the British Ambassador in the latter's absence. No appointment was made until Nov. 26, 1926, when, after decision to omit the arrangement that the Canadian Minister should substitute for the British Ambassador, Hon. Charles Vincent Massey was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in the United States of America to represent the interests of the Dominion of Canada (P.C. 1780 of Nov. 10, 1926). Mr. Massey took up his duties in February, 1927 and held office until July 23, 1930. Major W. D. Herridge, K.C., D.S.O., M.C., was appointed Minister to the United States on Mar. 7, 1931. The Canadian Legation in Washington is situated at 1746 Massachusetts Ave.

The United States Government reciprocated in 1927 by appointing Hon. William Phillips its first Minister to Canada; his successor, Lt.-Col. the Hon. Hanford MacNider, was appointed in August, 1930, and resigned in September, 1932. The office has since been vacant, pending an appointment by the Roosevelt Administration.

The Canadian Minister to France.—For many years the Canadian Government maintained an agency at Paris. The post was first occupied in 1882 by Hon. Hector Fabre, who also represented for a time the Government of Quebec. After his death Hon. Philippe Roy was appointed in May, 1911, with the title of Commissioner-General of Canada in France. In 1928 an exchange of Ministers was agreed upon between Canada and France, and in September of that year Hon. Philippe Roy was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in France to represent the interests of the Dominion of Canada. The Canadian Legation in Paris is situated at No. 1, rue François premier.

The French Government appointed M. Georges Jean Knight as its first Minister in Canada in 1928. On July 1, 1930, he was reappointed to the French Foreign Office, and on Mar. 12, 1931, M. Charles Arsène Henry was appointed his successor.

The Canadian Minister to Japan.—In 1928 an exchange of Ministers was agreed upon between the Governments of Canada and Japan, and Hon. H. M. Marler was appointed in 1929 as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in Japan to represent the interests of the Dominion of Canada.

The Japanese Government appointed Mr. Iyemasa Tokugawa as its first Minister in Canada in 1929.

Canadian Advisory Officer, League of Nations.—The precedent of appointing permanent representatives at Geneva accredited to the League of Nations was set, it is understood, by Japan, and has found favour especially among those nations which are situated at a distance from Geneva. It was found that, while countries adjacent to the seat of the League were able without difficulty to include in the personnel of their delegations to the Assembly and Council various advisors and assistants at a minimum of expense, distant countries were at a disadvantage in this respect. Canada's duties as a member of the Assembly and of the International Labour Conference, and as one of the eight countries represented on the Governing Body of the International Labour Office, made this disadvantage especially felt. Accordingly, the position of Dominion of Canada Advisory Officer, League of Nations, was created by Order in Council P.C. 2174 of Dec. 17, 1924, and Dr. W. A. Riddell was appointed to the post on Jan. 1, 1925.

The duties of the Canadian Advisory Officer are "to establish and maintain as close relations as possible with the Secretariats of the League of Nations and the International Labour Office", to "communicate with the Government of Canada as to all matters arising and requiring its attention", and to "act in all such matters in an advisory capacity to the Government of Canada and to delegates from the Government of Canada to conferences arising out of the organizations beforenamed". The office of the Canadian Advisory Officer is situated at 41, Quai Wilson, Geneva.

PART V.—CANADA AND THE LEAGUE OF NATIONS.[1]

The League of Nations is an association of States which have pledged themselves, in accepting the Covenant (*i.e.*, the constitution of the League), not to go to war before submitting their disputes with each other or States not Members of the League to arbitration or inquiry and a delay of from three to nine months. Furthermore, any State violating this pledge is automatically in a state of outlawry with the other States, which are bound to sever all economic and political relations with the defaulting member. The States Members of the League have pledged themselves to co-operate over a wide range of economic, social, humanitarian and labour questions.

The League of Nations came formally into existence on Jan. 10, 1920, through the coming into force of the Treaty of Versailles. The two official languages of the League are English and French. The seat of the League is Geneva, Switzerland. Canada, as a signatory of the Treaty of Versailles, has been a Member of the League from the beginning.

The Organs of the League.—The primary organs of the League are: (1) The Council; (2) The Assembly; (3) The Secretariat; (4) The International Labour Organization (see Chap. XIX); (5) The Permanent Court of International Justice.

The Council.—The Council now consists of five permanent Members (the British Empire, France, Italy, Japan[2] and Germany), together with nine non-permanent Members elected for three years (three retiring each year) from among the fifty-four States which are Members of the League. The non-permanent Members of the Council are at present as follows: Guatemala, Irish Free State and Norway, terms expiring 1933; Panama, China and Spain, terms expiring 1934; Czechoslovakia, the United States of Mexico and Poland, terms expiring 1935. Canada was a Member of the Council of the League from 1927 to 1930.

The Assembly.—Every State Member of the League is entitled to be represented by a delegation to the Assembly of not more than three delegates, but has only one vote. The Assembly normally meets at the seat of the League (Geneva) on the first Monday in September. In 1930, the Canadian delegation was headed by Rt. Hon. Sir R. L. Borden; in 1931, by the Hon. Hugh Guthrie and in 1932, by the Hon. C. H. Cahan. At the extraordinary Assembly in March, 1932, Rt. Hon. Sir G. H. Perley was the senior delegate.

The Secretariat.—The Secretariat is a permanent organ composed of the Secretary-General and a number of officials selected from among citizens of all Member

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[1] A fuller article on Canada and the League of Nations, contributed by N. A. Robertson of the Department of External Affairs to the 1931 Year Book, gave the names of the States Members of the League, information regarding the budget of the League, mandates, minorities, the economic and financial organization, the organization for communications and transit, the health organization and social and humanitarian work of the League, in addition to fuller treatments of the subjects here dealt with. This article appeared at pp. 115–22 of the 1931 Year Book. The text of the Covenant of the League of Nations, and the General Act for the Pacific Settlement of International Disputes, may be obtained from the King's Printer, Ottawa, price 25 cents.

[2] Japan gave formal notice of intention to withdraw from the League on March 27, 1933.

States and from the United States of America. The Secretary-General appointed by the Peace Conference was the Hon. Sir James Eric Drummond, K.C.M.G., C.B., who has submitted his resignation; his successor, M. Joseph A. Avenol, has been appointed by the Council with the approval of the majority of the Assembly. The other officials are appointed by the Secretary-General with the approval of the Council.

Permanent Court of International Justice.—The Permanent Court of International Justice was established by the Protocol of Dec. 16, 1920, in accordance with Article 14 of the Covenant of the League of Nations. It is composed of a body of fifteen judges elected by the Assembly and Council of the League of Nations for a term of nine years, and sits at the Hague. The Court is competent to hear and determine any dispute of an international character which the parties thereto submit to it; it may also give an advisory opinion upon any dispute or question referred to it by the Council or the Assembly. Article 36 of the Statute of the Court provides that any State may recognize as compulsory the jurisdiction of the Court in all or any classes of legal dispute concerning:—

(*a*) The interpretation of a Treaty.

(*b*) Any question of international law.

(*c*) The existence of any fact which, if established, would constitute a breach of an international obligation, and the nature and extent of the reparations to be made for the breach of the international obligation.

Canada has been a Member of the Court from its establishment, and in 1929 accepted, subject to certain reservations, the compulsory jurisdiction of the Court in the cases contemplated in Article 36.

CHAPTER IV.—POPULATION.[1]

The Population chapter of the Year Book is a *précis* of the results of investigations into the number and the constitution of the population made in the seven censuses of Canada since Confederation, summarizing the growth and distribution of population between 1871 and 1931, as shown by the successive decennial censuses, in regard to the chief matters investigated at the censuses.

The modern census, now established in all civilized countries as the chief method of measuring periodically the population and its social and economic condition, has been described by a modern United States writer as the greatest single peace-time activity in which a government engages, both in respect of the physical extent of its organization and the important part which its results play in the general administration of public affairs.

Under the Canadian constitution, the legal *raison d'être* of the census is to determine representation in the House of Commons; after each decennial census a redistribution of seats in the House, following the course of the movement of population, is made in the manner described on pp. 80-83 of this volume. But the census, especially since the introduction of methods of mechanical tabulation, has become far more than a mere counting of heads. It is a great periodical stocktaking of the people and their affairs, designed to show as fully as possible the stage which has been reached in the progress of the nation. Thus the numbers, local distribution, age, sex, racial origin, nationality, language, religion, education, housing and occupations of the people, severally constitute investigations of enormous importance, to which all the continuous and routine statistics collected in the ordinary course of administration must be related if their importance is to be realized. The census, in fine, rounds out and completes the scheme of information upon which the Government relies in conducting the business of the country.

On account of the requirements as to parliamentary representation and the payment of provincial subsidies, which are based on population, the Canadian census is taken on the *de jure* principle; *i.e.*, each person is counted as belonging to the locality in which he is regularly domiciled, irrespective of where he may be at the date of the enumeration. Under the *de facto* method, adopted in the United Kingdom, each individual is counted as belonging to the locality where he is found on the census date. The *de facto* method is undoubtedly simpler, but the *de jure* plan better portrays the permanent condition of the population. The chief difficulty in the application of the latter method is found in connection with holiday resorts, in the segregation of "visitors" and the tracing of "absentees". A date prior to the opening of the holiday season is accordingly chosen for the date of the census. In the Canadian census, students and inmates of hospitals are assigned to their home localities, while inmates of prisons, jails, lunatic asylums, etc., are counted where found.

Section 1.—Census Statistics of General Population.

Since the creation of the Dominion of Canada, in 1867, decennial censuses have been taken on the *de jure* plan as of the dates April 2, 1871, April 4, 1881, April 5, 1891, April 1, 1901, June 1, 1911, 1921, and 1931. The population of Canada and its percentage distribution as on each date, together with the absolute and percentage increases from decade to decade, are given in Tables **1** to **4** immediately following.

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[1] This chapter has been revised by E. S. Macphail, Chief, Demography Branch, Dominion Bureau of Statistics. A list of the publications of this branch will be found in Chapter XXIX, Section I, under "Population"

1.—Population of Canada, by Provinces and Territories, in the Census Years 1871 to 1931.[1]

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	94,021	108,891	109,078	103,259	93,728	88,615	88,038
Nova Scotia	387,800	440,572	450,396	459,574	492,338	523,837	512,846
New Brunswick	285,594	321,233	321,263	331,120	351,889	387,876	408,219
Quebec	1,191,516	1,359,027	1,488,535	1,648,898	2,005,776[2]	2,360,665[5]	2,874,255
Ontario	1,620,851	1,926,922	2,114,321	2,182,947	2,527,292[2]	2,933,662	3,431,683
Manitoba	25,228	62,260	152,506	255,211	461,394[2]	610,118	700,139
Saskatchewan	–	–	–	91,279	492,432	757,510	921,785
Alberta	–	–	–	73,022	374,295[3]	588,454	731,605
British Columbia	36,247	49,459	98,173	178,657	392,480	524,582	694,263
Yukon	–	–	–	27,219	8,512	4,157	4,230
Northwest Territories[4]	48,000	56,446	98,967	20,129	6,507[2]	7,988	9,723
Royal Canadian Navy	–	–	–	–	–	485	[6]
Totals	**3,689,257**	**4,324,810**	**4,833,239**	**5,371,315**	**7,206,643**	**8,787,949**[5]	**10,376,786**

2.—Percentage Distribution of Canadian Population, by Provinces and Territories, 1871 to 1931.

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island	2·55	2·52	2·25	1·92	1·30	1·01	0·85
Nova Scotia	10·51	10·19	9·32	8·56	6·83	5·96	4·94
New Brunswick	7·74	7·43	6·65	6·16	4·88	4·41	3·93
Quebec	32·30	31·42	30·80	30·70	27·83	26·87	27·70
Ontario	43·94	44·56	43·74	40·64	35·07	33·38	33·07
Manitoba	0·68	1·44	3·16	4·75	6·40	6·94	6·75
Saskatchewan	–	–	–	1·70	6·84	8·62	8·88
Alberta	–	–	–	1·36	5·19	6·70	7·05
British Columbia	0·98	1·14	2·03	3·33	5·45	5·97	6·69
Yukon	–	–	–	0·51	0·12	0·05	0·04
Northwest Territories[4]	1·30	1·30	2·05	0·37	0·09	0·09	0·09
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

3.—Population of Canada, by Provinces and Territories, in 1871 and 1931, Numerical Increase in each Decade from 1871 to 1931 and Total Increase.

Province or Territory.	Population in 1871.	Increase in each Decade from 1871 to 1931.						Population in 1931.	Increase, 1871 to 1931.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.		
	No.	No.	No.	No.	No.	No.	No.	No.	No.
P.E. Island	94,021	14,870	187	−5,819	−9,531	−5,113	−577	88,038	−5,983
N.S.	387,800	52,772	9,824	9,178	32,764	31,499	−10,991	512,846	125,046
N.B.	285,594	35,639	30	9,857	20,769	35,987	20,343	408,219	122,625
Que.	1,191,516	167,511	129,508	160,363	356,878	354,889[5]	513,590	2,874,255	1,682,739
Ont.	1,620,851	306,071	187,399	68,626	344,345	406,370	498,021	3,431,683	1,810,832
Man.	25,228	37,032	90,246	102,705	206,183	148,724	90,021	700,139	674,911
Sask.	–	–	–	91,279	401,153	265,078	164,275	921,785	921,785
Alta.	–	–	–	73,022	301,273	214,159	143,151	731,605	731,605
B.C.	36,247	13,212	48,714	80,484	213,823	132,102	169,681	694,263	658,016
Yukon	–	–	–	27,219	−18,707	−4,355	73	4,230	4,230
N.W.T[4]	48,000	8,446	42,521	−78,838	−13,622	1,481	1,735	9,723	−38,277
Royal Cdn. Navy	–	–	–	–	–	485	[6]	[6]	–
Totals	**3,689,257**	**635,553**	**503,429**	**538,076**	**1,835,328**	**1,581,303**[5]	**1,588,837**	**10,376,786**	**6,687,529**

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[1] The population of the Prairie Provinces in 1906, 1916 and 1926 is shown on pp. 127–128 of the 1930 Year Book. For intercensal estimated populations, see Table **37**, p. 145. [2] Corrected as a result of the Extension of Boundaries Act, 1912. [3] Corrected by transfer of population of Fort Smith (368) to Northwest Territories. [4] The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of vast areas to form Alberta, Saskatchewan and Yukon and to extend the boundaries of Quebec, Ontario and Manitoba. [5] Revised in accordance with the Labrador award of the Privy Council, Mar. 1, 1927. [6] Members of the Royal Canadian Navy were counted in their homes in the census of 1931.

4.—Population of Canada, by Provinces and Territories, in 1871, and Increase Per Cent, by Decades, from 1871 to 1931.

Province or Territory.	Population in 1871.	Increase per cent, by Decades, from 1871 to 1931.						Increase per cent in 60 Years.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931	
	No.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island........	94,021	15·82	0·17	−5·33	−9·23	−5·46	−0·65	−6·36
Nova Scotia..................	387,800	13·61	2·23	2·04	7·13	6·40	−2·10	32·24
New Brunswick	285,594	12·48	0·01	3·07	6·27	10·23	5·24	42·94
Quebec.........................	1,191,516	14·06	9·53	10·77	21·64	17·69[2]	21·76	141·23
Ontario........................	1,620,851	18·88	9·73	3·25	15·77	16·08	16·98	111·72
Manitoba......................	25,228	146·79	144·95	67·34	80·79	32·23	14·75	2,675·25
Saskatchewan...............	–	–	–	–	439·48	53·83	21·69	–
Alberta	–	–	–	–	412·58	57·22	24·33	–
British Columbia.........	36,247	36·45	98·49	81·98	119·68	33·66	32·35	1,815·37
Yukon	–	–	–	–	−68·73	−51·16	1·76	–
Northwest Territories[1]...	48,000	17·60	75·33	−79·66	−67·67	22·76	21·72	−79·74
Totals...............	**3,689,257**	**17·23**	**11·76**	**11·13**	**34·17**	**21·94**[2]	**18·08**	**181·27**

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[1] The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of immense areas to form Yukon and the provinces of Alberta and Saskatchewan as well as to extend the boundaries of the older provinces of Quebec, Ontario and Manitoba.

[2] Revised in accordance with the Labrador award of the Privy Council, Mar. 1, 1927.

Early Censuses.—The credit of taking the first census of modern times belongs to Canada. The year was 1666, the census that of the colony of New France. Still earlier records of settlement at Port Royal (1605) and Quebec (1608) are extant; but the census of 1666 was a systematic "nominal" enumeration of the people, taken on the *de jure* principle on a fixed date, showing age, sex, occupation and conjugal and family condition. A second census in 1667 included the areas under cultivation and the numbers of sheep and cattle. When it is recalled that in Europe the first census dates only from the eighteenth century (those of France and England from the first year of the nineteenth) and that, in the United States, the census begins only with 1790, the achievement of the primitive St. Lawrence colony, in instituting what is to-day one of the principal instruments of government throughout the civilized world, may call for more than passing appreciation.

The census of 1666 (the results occupy 154 pages in manuscript, and are still to be seen in the Archives in Paris, or in a transcript at Ottawa) showed some 3,215 souls. It was repeated at intervals more or less regularly for a hundred years. By 1685 the total had risen to 12,263, including 1,538 Indians settled in villages and living a civilized life under the supervision of the missionaries. By the end of the century it had passed 15,000, and this was doubled in the next twenty-five years. Not to present further details, some of which will be found in the Chronology on pp. 60-69, it may be said that at the time of the cession (1763) the population of New France was nearly 70,000 (69,810 in 1765), whilst another 10,000 French (thinned to these proportions by the expulsion of the Acadians) were scattered through what are now Nova Scotia, New Brunswick and Prince Edward Island. The British population of Nova Scotia was 8,104 in 1762, thirteen years after the foundation of Halifax in 1749.

Our chief sources of statistics for half a century and more after the cession are the reports—more or less sporadic—of colonial governors though censuses of the different sections under British rule were taken at irregular intervals. British settlement on a substantial scale in the Gulf provinces and in Ontario dates only from the Loyalist movement which followed the American Revolution, at the end of which, *i.e.*, about the year of the Constitutional Act (1791), the population of

Lower Canada was approximately 163,000, whilst the newly constituted province of Upper Canada, under Lieutenant-Governor Simcoe, numbered perhaps 15,000, and the addition of the maritime colonies brought the total to well over 200,000. A decade later Canada began the nineteenth century with a population of probably not less than 250,000 or 260,000. Subsequent censuses gave the populations of the different colonies as follows: Upper Canada (1824) 150,066, (1840) 432,159; Lower Canada (1822) 427,465, (1844) 697,084; New Brunswick (1824) 74,176, (1840) 156,162; Nova Scotia (1817) 81,351, (1838) 202,575; Prince Edward Island (1822) 24,600, (1841) 47,042.[1]

The policy of desultory census-taking was ended in 1847 by an Act of the Canadian Legislature creating a "Board of Registration and Statistics" with instructions "to collect statistics and adopt measures for disseminating or publishing the same" and providing also for a decennial census. The first census thereunder was taken in 1851 and, as similar censuses were taken by New Brunswick and Nova Scotia in the same year, we have a regular measure of population growth in Canada over the past 80 years. The 'fifties saw a very rapid development, especially in Ontario, whilst the 'sixties showed only less substantial gains. In the years following Confederation there was a spurt, the increase between 1871 and 1881 (which included several lean years towards the end) being 635,553, or 17·23 p.c. In neither of the last two decades of the nineteenth century, however, was this record equalled either absolutely or relatively, the gains in each being under 550,000, or 12 p.c. With the end of the century the population of Canada had reached approximately five and a third millions, or twenty times that of 1800. It has increased by five millions in the past thirty years.

Expansion in the Twentieth Century.—It is within the present century that the most spectacular expansion of the population of Canada has taken place. The outstanding feature was, of course, the opening to settlement of the "last best West". The unorganized territories of British North America had been ceded to the Dominion soon after Confederation, and the West had been tapped and traversed by the Canadian Pacific Railway in the 'eighties and 'nineties. But though western population was doubled in each of these decades, it was only with the launching of a large-scale immigration movement after 1900 that western settlement and production became a first-rate economic factor. Simultaneously an almost equally striking development occurred in the industrial centres of Eastern Canada, forming the immediate basis for the move upon the West. At the back, of course, was the heavy inflow of British and other capital—a total of $1,500,000,000 between 1900 and 1912—which went to finance the large constructive undertakings (chiefly railway, municipal and industrial) which characterized the movement and which represented at bottom the traditional policy of England in search of cheap and abundant food for her workshop population. The years 1901 to 1911, in brief, form the *decas mirabilis* of Canadian expansion. The immigration movement just mentioned, which had previously run well under 50,000 per annum, rose rapidly to over five times that volume, eventually passing 400,000 in a single year. In the ten years between 1901 and 1911 it exceeded 1,800,000 and, though at least a third of these were lost (partly in the return to Europe of labour temporarily attracted by the railway and other developments in progress, and partly in the never-ceasing and natural "drag" of the United States upon a virile and less wealthy people), it formed the chief factor in the gain of 34 p.c. which the total population of Canada registered in that decade, and which was larger than the relative growth of any other country during the same period. The movement was continued and even intensified in the first three years of the second decade of the century, after which a recession set in to which the outbreak of war gave a new and wholly unexpected turn. Nevertheless, the decade which closed with the census of 1921 showed over 1,700,000 immigrant arrivals in Canada, and, though the proportionate loss of these was very heavy (probably as much as two-thirds), Canada's relative gain for the decade was again among the largest in the world.

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[1] A résumé of the results of all the censuses taken in Canada between 1666 and 1861 was published as Vol. IV of the census of 1871.

Results of the Census of 1931.—According to the final results of the 1931 census, the total population of the Dominion on June 1, 1931, was 10,376,786, as compared with 8,787,949 on June 1, 1921, an increase of 1,588,837 or 18·08 p.c. in the decade, as compared with 21·94 p.c. and 34·17 p.c. during the decades 1911 to 1921 and 1901 to 1911 respectively.

During the decade 1911-21 the countries which comprise the British Empire, and more especially the United States which was in the Great War for only nineteen months as against Canada's fifty-two, suffered less in actual loss of life from the War and its consequences than the continental countries of Europe. None of them declined in population during the period, as many continental European countries did. Their percentage increases, however, were in almost all cases lower than in the previous decade. Thus the population of England and Wales increased between 1911 and 1921 only from 36,070,492 to 37,885,242, or 5·0 p.c., as compared with an increase of 10·9 p.c. in the previous decade; Scotland, again, increased only from 4,760,904 to 4,882,497, or 2·6 p.c., as compared with 6·5 p.c. between 1901 and 1911. Nor has this situation been much improved in the post-war decade 1921-31, for the increase in England and Wales during these years was but 5·4 p.c. and Scotland actually showed a decrease of 0·8 p.c. Of the overseas Dominions, New Zealand, according to the latest official estimate (the census of 1931 was postponed), increased her population from 1,218,913 to 1,510,940 or by nearly 24 p.c. for the decade ended 1931, as compared with 20·9 p.c. and 30·5 p.c. respectively for the decades ended 1921 and 1911. In the case of the white population of South Africa, much the same condition obtained. The Commonwealth of Australia, the only Dominion to grow more rapidly in the second decade of the twentieth century than in the first, increased from 4,455,005 in 1911 to 5,435,734 in 1921 or by 22·01 p.c. as compared with 18·05 p.c. for the previous decade and 19·4 p.c. for the most recent decade 1921-31 (based on the latest official population estimate of 6,488,707 for 1931[1]). The population of the continental United States increased between 1920 and 1930 from 105,710,620 to 122,775,046, an increase of 16·1 p.c., as compared with 14·9 p.c. in the decade 1910-20 and 21 p.c. in the decade 1900-10.

Considering now the movement of population within the Dominion of Canada itself, it is evident from Table **1** that in this country, as formerly in the United States, there is a distinct movement of population from east to west. In the decade from 1911 to 1921 this was clearly apparent, for the four western provinces then increased their population by no less than 44 p.c. and for the decade 1921-31 the increase was from 2,480,664 to 3,047,792, or 22·86 p.c. From 1921 to 1931 the five eastern provinces increased from 6,294,655 to 7,315,041, an increase of 1,020,386 persons, which, though absolutely larger than the figure for the West, constitutes an increase of only 16·2 p.c. over the 1921 population. The same conclusion may be deduced from Table **2**, which shows that while in 1871 only 2·96 p.c. and in

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[1] As in the case of New Zealand the census of 1931 was postponed

1881 only 3·88 p.c. of the population of the country dwelt west of the lake of the Woods, the percentage in 1891 was 7·24; in 1901, 12·02; in 1911, 24·09; in 1921, 28·37; and in 1931, 29·50.

On the other hand, the Maritime Provinces, which in 1871 contained 20·80 p.c. of the total population of the Dominion, had in 1881 20·14 p.c., in 1891 18·22 p.c., in 1901 16·64 p.c., in 1911 13·01 p.c., in 1921 11·38 p.c., and in 1931 only 9·72 p.c. of the population. Ontario and Quebec—the old pre-Confederation Province of Canada—still remain the chief centre of population. Their proportion of the total was 60·77 p.c. in 1931, as compared with 76·24 p.c. in 1871, 75·98 p.c. in 1881, 74·54 p.c. in 1891, 71·34 p.c. in 1901, 62·90 p.c. in 1911 and 60·25 p.c. in 1921. In other words, the net result of the sixty years has been that in 1931 three-fifths of the population of the Dominion lived in these provinces as compared with more than three-fourths in 1871.

In 1881 the "centre" of population east and west was in the county of Prescott, Ontario, not far from Caledonia village. In 1891 it had moved west to the vicinity of Ottawa, where it remained in 1901. In 1911 the county of Victoria, Ontario, contained the centre, and it was probably in the Parry Sound district of Ontario in 1921 and at the present time is somewhat west of this locality.

Density of Population.—The density of population in 1931 (*i.e.*, the number of persons per square mile of the land area as in that year), as compared with 1921 and 1911, is shown by provinces and for the country as a whole in Table **5**. Generally speaking the density of population decreases as one travels westward, but the enormous area of the province of Quebec unduly reduces the density of its population, which was 5·49 in 1931. As among the nine provinces, the density of population is greatest in Prince Edward Island and least in British Columbia.

5.—Density of Population in Canada, by Provinces and Territories, 1911, 1921 and 1931.

NOTE.—Densities are for revised land areas as in 1933 (see p. 7).

Province.	1911.	1921.	1931.	Province or Territory.	1911.	1921.	1931.
Prince Edward Island	42·92	40·57	40·31	Saskatchewan	2·07	3·18	3·87
Nova Scotia	23·74	25·25	24·72	Alberta	1·50	2·37	2·94
New Brunswick	12·70	14·00	14·73	British Columbia	1·12	1·50	1·98
Quebec	3·83	4·51	5·49	**Canada, Exclusive of the Territories**	**3·61**	**4·40**	**5·20**
Ontario	6·96	8·08	9·45	Yukon	0·04	0·02	0·02
Manitoba	2·10	2·78	3·19	Northwest Territories	0·005	0·006	0·007
				Canada	**2·08**	**2·54**	**3·00**

Elements of Growth.—The former lack of comprehensive and comparable vital statistics for the whole of Canada, together with the lack of statistics of emigration, makes it difficult to determine how far the growth of population since the commencement of the twentieth century is due to natural increase and how far to immigration. The following estimate (Table **6**) may, however, be of interest. During the decade 1911-21, in addition to 60,000 Canadians who died overseas and nearly 20,000 who took their discharge in the United Kingdom, there were also great numbers of residents of Canada—most of them recent immigrants—who left Canada to join the forces of the Mother Country and her allies in the Great War and did not return.

6.—Movement of Population, including Estimated Natural Increase, Recorded Immigration and Estimated Emigration, for the Inter-Censal Periods 1901-11, 1911-21 and 1921-31.

Decade and Item.	No.
Decade 1901-1911—	
Population, Census of April 1, 1901	5,371,315
Natural increase (1901-1911), estimated	853,566
Immigration (April 1, 1901, to May 31, 1911)	1,847,651
Total	8,072,532
Population, Census of June 1, 1911	7,206,643
Emigration (April 1, 1901, to May 31, 1911), estimated	865,889
Decade 1911-1921—	
Population, Census of June 1, 1911	7,206,643
Natural increase (1911-1921), estimated	1,150,125
Immigration (June 1, 1911, to May 31, 1921)	1,728,921
Total	10,085,689
Population, Census of June 1, 1921	8,787,949[1]
Emigration (June 1, 1911, to May 31, 1921) estimated	1,297,740[2]
Decade 1921-1931—	
Population, Census of June 1, 1921	8,787,949[1]
Natural Increase (1921-1931), partly estimated for the years 1921-25 in the case of Quebec.	1,325,256
Immigration (June 1, 1921, to May 31, 1931), including 288,874 returned Canadians	1,509,136
Total	11,622,341
Population, Census of June 1, 1931	10,376,786
Emigration (June 1, 1921 to May 31, 1931), estimated	1,245,555
Net gain in population, 1901-1911	1,835,328
Net gain in population, 1911-1921	1,581,306
Net gain in population, 1921-1931	1,588,837

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[1] Revised in accordance with the Labrador award of the Privy Council, Mar. 1, 1927.

[2] This figure includes also the 60,000 Canadian lives lost at the front and the soldiers (about 20,000) enlisting in the Canadian forces and receiving their discharge in the United Kingdom.

Subsection 1.—Population of Canada by Provinces and Electoral Districts.

The populations of the several provinces and electoral districts of Canada in 1931 as compared with 1921 are given in Table 7.

7.—Population of Canada, by Provinces and Electoral Districts, 1931, Compared with 1921.

Province and Electoral District.	Population.		Province and Electoral District.	Population.	
	1931.	1921.		1931.	1921.
Prince Edward Island	**88,038**	**88,615**	**New Brunswick**	**408,219**	**387,876**
Kings	19,147	20,445	Charlotte	21,337	21,435
Prince	31,500	31,520	Gloucester	41,914	38,684
Queens	37,391	36,650	Kent	23,478	23,916
			Northumberland	34,124	33,985
Nova Scotia	**512,846**	**523,837**	Restigouche-Madawaska	54,386	42,977
Antigonish-Guysborough	25,516	27,098	Royal	31,026	32,078
			St. John-Albert	69,292	69,093
Cape Breton North-Victoria	29,116	31,325	Victoria-Carleton	35,703	33,900
Cape Breton South	66,999	58,716	Westmorland	57,506	53,387
Colchester	25,051	25,196	York-Sunbury	39,453	38,421
Cumberland	36,366	41,191			
Digby-Annapolis	34,650	37,765	**Quebec**	**2,874,255**	**2,360,665**
Halifax City and County	100,204	97,228	Argenteuil	18,976	17,165
Hants-Kings	43,750	43,462	Bagot	16,914	18,035
Inverness	21,055	23,808	Beauce	57,544	52,701
Pictou	39,018	40,851	Beauharnois	25,163	19,888
Queens-Lunenburg	42,286	43,686	Bellechasse	21,296	21,190
			Berthier-Maskinongé	35,545	36,762
Richmond-West Cape Breton	15,411	17,646	Bonaventure	32,432	29,092
Shelburne-Yarmouth	33,424	35,865	Brome-Missisquoi	32,069	31,090

7.—Population of Canada, by Provinces and Electoral Districts, 1931, Compared with 1921—continued.

Province and Electoral District.	Population.	
	1931.	1921.
Quebec—concluded.		
Chambly-Verchères	39,404	34,643
Champlain	50,176	47,852
Charlevoix-Saguenay	54,999	45,692
Châteauguay-Huntingdon	25,470	26,731
Chicoutimi	55,724	37,578
Compton	31,858	32,816
Dorchester	31,693	29,563
Drummond-Arthabaska	53,338	44,823
Gaspé	45,617	40,375
Hull	49,196	39,180
Joliette	27,585	25,913
Kamouraska	24,085	22,014
Labelle	36,953	35,927
Lake St. John	50,253	35,539
Laprairie-Napierville	21,091	20,065
L'Assomption-Montcalm	29,188	28,318
Laval-Two Mountains	30,434	28.314
Lévis	35,656	33,323
L'Islet	19,404	17,859
Lotbinière	23,034	21,837
Matane	45,272	36,303
Mégantic	35,492	33,633
Montmagny	20,239	21,997
Nicolet	28,673	29,695
Pontiac	64,155	45,682
Portneuf	39,522	34,452
Quebec-Montmorency	39,552	31,000
Quebec-East	55,596	40,722
Quebec-South	36,235	25,875
Quebec-West	52,309	37,562
Richelieu	21,483	19,548
Richmond-Wolfe	41,867	42,248
Rimouski	33,151	27,520
St. Hyacinthe-Rouville	39,630	36,754
St. Johns-Iberville	27,051	23,518
Shefford	28.262	25,734
Sherbrooke	37,386	30,786
Stanstead	25,118	23,380
Témiscouata	50,163	44,310
Terrebonne	38.611	33,908
Three Rivers-St. Maurice	69,095	50,845
Vaudreuil-Soulanges	21,114	21,620
Wright	27,107	25,867
Yamaska	16,820	18,056
Quebec Unorganized[1]	1,387	1,160
Montreal Island	1,003,868	724,205
Cartier	48,064	48,869
Hochelaga	87,096	67,836
Jacques-Cartier	130,776	70,856
Laurier-Outremont	88,579	67,682
Maisonneuve	116,311	65,646
Mount Royal	93,035	39,487
St. Ann	60,696	54,834
St. Antoine	36.033	33,338
St. Denis	140,940	75,475
St. Henri	44,019	44,372
St. James	54,903	54,741
St. Lawrence-St. George	37,861	37,688
St. Mary	65,555	63,381
Ontario	**3,431,683**	**2,933,662**
Algoma East	37,455	37,012
Algoma West	38,425	35,586
Brant	21,202	21,970
Brantford City	32,274	31,407
Bruce North	20,466	20,872
Bruce South	21,820	23,413
Carleton	38,619	32,673
Dufferin-Simcoe	32,763	33,289
Durham	25,782	24,629
Elgin West	34,068	35,413
Ontario—concluded.		
Essex East	42,976	25,283
Essex South	35,044	29,375
Essex West	83,808	49,418
Fort William	36,040	27,964
Frontenac-Addington	29,434	30,696
Glengary	18,666	20,518
Grenville-Dundas	32,425	33,953
Grey North	30,288	30,667
Grey Southeast	27,411	28,384
Haldimand	21,428	21,287
Halton	26,558	24,899
Hamilton East	66.771	54,233
Hamilton West	56,305	53,254
Hastings-Peterborough	27,160	27,476
Hastings South	39,327	37,838
Huron North	22,662	23,540
Huron South	22,518	23,548
Kenora-Rainy River	33,925	26,315
Kent	54,715	50,638
Kingston City	26,180	24,104
Lambton East	26,736	28,271
Lambton West	34,040	30,418
Lanark	32,856	32,993
Leeds	35,157	34,909
Lincoln	54,199	48,625
London	59,821	53,838
Middlesex East	34,788	27,994
Middlesex West	23,632	25.033
Muskoka-Ontario	35,513	35,021
Nipissing	70,204	49,969
Norfolk-Elgin	40,727	35,937
Northumberland	30,727	30,512
Ontario	45,139	31,074
Ottawa	106,077	93,740
Oxford North	25,244	24,527
Oxford South	22,581	22,235
Parkdale	59,246	59,545
Parry Sound	25,900	26,860
Patricia[1]	3,973	2,477
Peel	28,156	23,896
Perth North	33.822	32,461
Perth South	17,570	18,382
Peterborough West	37,042	35,243
Port Arthur-Thunder Bay	35,865	26,871
Prescott	24,596	26,478
Prince Edward-Lennox	25,718	25,494
Renfrew North	27,230	27,079
Renfrew South	26,986	27,061
Russell	43,831	43,413
Simcoe East	36,572	37,122
Simcoe North	29,224	29,036
Stormont	32,524	25,134
Timiskaming North	58,284	26,328
Timiskaming South	43,948	31,743
Toronto East	68,987	63,735
Toronto East Centre	66,341	69,717
Toronto-High Park	64,088	51,645
Toronto Northeast	106,123	58,319
Toronto Northwest	70,729	61,484
Toronto-Scarborough	87,656	49,749
Toronto South	46,065	48,502
Toronto West Centre	61,972	59,197
Victoria	31,841	33,995
Waterloo North	53,777	41,698
Waterloo South	36,075	33,568
Welland	82,731	66,668
Wellington North	19,035	19,833
Wellington South	39,129	34,327
Wentworth	66,943	46,080
York North	38,607	36,222
York South	62,258	27,895
York West	124,883	61,655

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[1] Unorganized, not included in any electoral district.

7.—Population of Canada, by Provinces and Electoral Districts, 1931, Compared with 1921—concluded.

Province and Electoral District.	Population.		Province and Electoral District.	Population.	
	1931.	1921.		1931.	1921.
Manitoba	**700,139**	**610,118**	**Alberta**	**731,605**	**588,454**
Brandon	40,483	38,500	Acadia	34,896	39,974
Dauphin	37,703	38,607	Athabaska	55,298	37,214
Lisgar	31,891	30,604	Battle River	43,441	36,737
Macdonald	32,090	31,877	Bow River	35,901	34,323
Marquette	37,468	34,482	Calgary East	51,640	38,076
Neepawa	27,429	29,941	Calgary West	50,898	40,122
Nelson	32,238	20,868	Camrose	39,806	38,274
Portage la Prairie	33,979	35,461	Edmonton East	48,865	36,263
Provencher	32,613	29,439	Edmonton West	51,584	38,748
Selkirk	44,506	41,265	Lethbridge	47,871	38,079
Souris	26,726	24,439	Macleod	40,336	33,826
Springfield	42,350	30,836	Medicine Hat	32,709	36,395
St. Boniface	43,389	35,429	Peace River	76,778	39,727
Winnipeg North	62,917	52,473	Red Deer	39,385	35,318
Winnipeg North Centre	45,350	39,142	Vegreville	37,442	30,593
Winnipeg South	51,518	32,943	Wetaskiwin	44,755	34,785
Winnipeg South Centre	77,489	63,812			
Saskatchewan	**921,785**	**757,510**	**British Columbia**	**694,263**	**524,582**
Assiniboia	41,144	34,789	Cariboo	52,702	39,834
Humboldt	44,146	37,128	Comox-Alberni	25,369	21,378
Kindersley	35,290	28,997	Fraser Valley	38,507	28,811
Last Mountain	36,507	34,054	Kootenay East	22,566	19,137
Long Lake	31,266	32,308	Kootenay West	39,943	30,502
Mackenzie	44,869	34,669	Nanaimo	55,524	48,010
Maple Creek	43,903	38,586	New Westminster	69,294	45,982
Melfort	52,608	30,716	Skeena	30,358	28,934
Melville	39,338	36,842	Vancouver-Burrard	82,519	56,338
Moose Jaw	42,334	42,243	Vancouver Centre	75,234	60,879
North Battleford	53,708	34,451	Vancouver North	32,972	24,215
Prince Albert	50,896	39,126	Vancouver South	89,556	46,137
Qu'Appelle	35,938	33,003	Victoria	39,082	38,727
Regina	60,858	40,625	Yale	40,637	35,698
Rosetown	32,526	29,341			
Saskatoon	60,636	40,712			
South Battleford	45,199	35,070	**Yukon**	**4,230**	**4,157**
Swift Current	41,717	40,305			
Weyburn	41,684	37,431			
Willow Bunch	48,466	39,257	**Northwest Territories**	**9,723**	**7,988**
Yorkton	38,692	37,857			

Section 2.—Sex Distribution.

Throughout the older countries of the world there is usually found an excess of female over male population, more especially as in most of these countries the census is taken on a *de facto* instead of, as in Canada, on a *de jure* basis. The causes of this excess of female population are: (1) the normally higher rate of mortality among males; (2) the greater number of males who travel; (3) the effects of war; (4) the employment of males in the army, navy and merchant marine; and (5) the preponderance of males among emigrants. In the newer countries of the world, however, the preponderance of males among immigrants results in a general excess of male over female population. These phenomena are exemplified for both the older and the newer countries in Table **10**.

In Canada there has been an excess of male population from the commencement of its history, the first census of 1666 showing 2,034 males to only 1,181 females. As the colony increased in numbers, the disproportion between the sexes became smaller, more especially since the French-Canadian population, after about 1680, was not reinforced by immigration from the old world. In 1784, when the English-speaking immigration to Canada for purposes of settlement was commencing, there were 54,064 males and 50,759 females in the colony. At the middle of the nineteenth century, there were 449,967 males to 440,294 females in Lower Canada, and 499,067 males to 452,937 females in the more newly-settled Upper Canada, and since Confederation the same phenomenon of considerable excess of males has occurred throughout the growing Northwest. The great immigration of the first decade of the present century resulted in raising what is called the "masculinity" of the Canadian population (*i.e.*, the excess of males over females per 100 of population) to the highest point in recent history, *viz.*, 6·07 p.c. in 1911. The Great War, however, both checked immigration and took about 60,000 young Canadian male lives as its toll, with the result that at the census of 1921 the masculinity of our population was only 3 p.c.— 515 males to 485 females per 1,000 of population.

In 1931 there were 518 males to 482 females for Canada as a whole. It is interesting to note that the masculinity of the population has increased in the eastern provinces and decreased in the western ones, where it was formerly greatest. In Table 8 statistics are presented, showing the number of males and females in each of the provinces and territories at each census since 1871, while Table **9** shows the proportions of the sexes and excess of males per 1,000 of population. The statistics of Table **10** show the position of Canada among other countries of the world in regard to masculinity.

8.—Sex Distribution of the People of Canada, by Provinces, 1871-1931.

Province.	1871.		1881.		1891.	
	Male.	Female.	Male.	Female.	Male.	Female.
Prince Edward Island	47,121	46,900	54,729	54,162	54,881	54,197
Nova Scotia	193,792	194,008	220,538	220,034	227,093	223,303
New Brunswick	145,888	139,706	164,119	157,114	163,739	157,524
Quebec	596,041	595,475	678,175	680,852	744,141	744,394
Ontario	828,590	792,261	978,554	948,368	1,069,487	1,044,834
Manitoba	12,864	12,364	35,123	27,137	84,342	68,164
Saskatchewan	–	–	–	–	–	–
Alberta	–	–	–	–	–	–
British Columbia	20,694	15,553	29,503	19,956	63,003	35,170
Yukon	–	–	–	–	–	–
Northwest Territories	24,274	23,726	28,113	28,333	53,785	45,182
Canada	**1,869,264**	**1,819,993**	**2,188,854**	**2,135,956**	**2,460,471**	**2,372,768**

Province.	1901.		1911.		1921.		1931.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
P.E.Island	51,959	51,300	47,069	46,659	44,887	43,728	45,392	42,646
N.S	233,642	225,932	251,019	241,319	266,472	257,365	263,104	249,742
N.B	168,639	162,481	179,867	172,022	197,351	190,525	208,620	199,599
Que	824,454	824,444	1,012,815	992,961	1,179,726	1,180,939	1,447,124	1,427,131
Ont	1,096,640	1,086,307	1,301,272	1,226,020	1,481,890	1,451,772	1,748,844	1,682,839
Man	138,504	116,707	252,954	208,440	320,567	289,551	368,065	332,074
Sask	49,431	41,848	291,730	200,702	413,700	343,810	499,935	421,850
Alta	41,019	32,003	223,792	150,503	324,208	264,246	400,199	331,406
B.C	114,160	64,497	251,619	140,861	293,409	231,173	385,219	309,044
Yukon	23,084	4,135	6,508	2,004	2,819	1,338	2,825	1,405
N.W.T	10,176	9,953	3,350	3,157	4,129	3,859	5,214	4,509
Canada	**2,751,708**	**2,619,607**	**3,821,995**	**3,384,648**	**4,529,643**[1]	**4,258,306**	**5,374,511**	**5,002,245**

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[1] Includes 485, Royal Canadian Navy.

9.—Proportion of Sexes per 1,000 of Population in Canada, by Provinces, 1871-1931.

Province.	1871.			1881.			1891.		
	Males.	Females.	Excess of Males over Females.	Males.	Females.	Excess of Males over Females.	Males.	Females.	Excess of Males over Females.
Prince Edward Island	501	499	2	503	497	6	503	497	6
Nova Scotia	500	500	–	501	499	2	504	496	8
New Brunswick	511	489	22	511	489	22	510	490	20
Quebec	500	500	–	499	501	−2	500	500	–
Ontario	511	489	22	508	492	16	506	494	12
Manitoba	510	490	20	564	436	128	553	447	106
Saskatchewan	–	–	–	–	–	–	–	–	–
Alberta	–	–	–	–	–	–	–	–	–
British Columbia	571	429	142	597	403	194	642	358	284
Yukon	–	–	–	–	–	–	–	–	–
Northwest Territories	506	494	12	498	502	−4	543	457	86
Canada	**507**	**493**	**14**	**506**	**494**	**12**	**509**	**491**	**18**

Province.	1901.			1911.			1921.			1931.		
	Males.	Females.	Excess of Males over Females	Males.	Females.	Excess of Males over Females	Males.	Females.	Excess of Males over Females	Males.	Females.	Excess of Males over Females
P.E. Island	503	497	6	502	498	4	507	493	14	516	484	32
N.S.	508	492	16	510	490	20	509	491	18	513	487	26
N.B.	509	491	18	511	489	22	509	491	18	511	489	22
Que	500	500	–	505	495	10	500	500	–	503	497	6
Ont	502	498	4	515	485	30	505	495	10	510	490	20
Man	543	457	86	548	452	96	525	475	50	526	474	52
Sask	542	458	84	592	408	184	546	454	92	542	458	84
Alta	562	438	124	598	402	196	551	449	102	547	453	94
B.C	639	361	278	641	359	282	559	441	118	555	445	110
Yukon	848	152	696	765	235	530	678	322	356	668	332	336
N.W.T.	506	494	12	515	485	30	517	483	34	536	464	72
Canada	**512**	**488**	**24**	**530**	**470**	**60**	**515**	**485**	**30**	**518**	**482**	**36**

10.—Masculinity of the Populations of Various Countries in Recent Years.

NOTE.—The minus sign (—) indicates a deficiency of males.

Country.	Year.	Excess of Males over Females in each 100 Population.	Country.	Year.	Excess of Males over Females in each 100 Population.
Argentina	1928	6·57	Sweden	1930	−1·53
Canada	**1931**	**3·51**	Denmark	1930	−2·20
India	1931	3·07	Italy	1931	−2·27
New Zealand	1931	2·18	Norway	1930	−2·63
Australia	1931	1·88	Finland	1920	−2·67
Union of South Africa[1]	1931	1·80	Germany	1925	−3·14
Irish Free State	1929	1·56	Northern Ireland	1926	−3·26
United States	1930	1·22	Poland	1921	−3·37
Japan	1930	0·51	Switzerland	1930	−3·65
Bulgaria	1926	0·12	Scotland	1931	−3·94
Netherlands	1930	−0·62	France	1926	−4·00
Greece	1928	−0·84	England and Wales	1931	−4·18
Belgium	1930	−0·96	Austria	1920	−4·23
Chile	1930	−0·98	U.S.S.R. (in Europe)	1926	−4·89
Spain	1930	−1·32	Portugal	1930	−6·81

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[1] White population only.

Section 3.—Conjugal Condition.

In Table **11** are given, in summary form together with percentages, the statistics of the conjugal condition of the population, as single, married, widowed, divorced and legally separated, for 1871 and subsequent censuses. Especially notable is the larger percentage of married in the more recent years. This is mainly attributable to the larger percentage of adults to total population in our own time. Noteworthy also is the larger percentage of divorced and legally separated in recent years. The reader is referred to p. 166, Table **19**, for details of divorces granted in the years 1901-32.

The conjugal condition of the 1931 population is shown by provinces in Table **12** and by age-groups in Table **13**.

11.—Conjugal Condition of the Population, by Numbers and Percentages, as Shown by Censuses of 1871, 1881, 1891, 1901, 1911, 1921 and 1931.

Sex.	Single.	Married.	Widowed.	Divorced.	Legally Separated.	Not Given.	Total.
1871—	No.	No.	No.	No.	No.	No.	No.
Male	1,183,787	543,037	37,487	–	–	–	1,764,311
Female	1,099,216	542,339	79,895	–	–	–	1,721,450
1881—							
Male	1,447,415	690,544	50,895	–	–	–	2,188,854
Female	1,336,981	689,540	109,435	–	–	–	2,135,956
1891—							
Male	1,601,541	796,153	62,777	–	–	–	2,460,471
Female	1,451,851	791,902	129,015	–	–	–	2,372,768
1901—							
Male	1,748,582	928,952	73,837	337	–	–	2,751,708
Female	1,564,011	904,091	151,181	324	–	–	2,619,607
1911—							
Male	2,369,766	1,331,853	89,154	839	1,286	29,097	3,821,995
Female	1,941,886	1,251,468	179,656	691	1,584	9,363	3,384,648
1921—							
Male	2,698,564	1,698,297	119,695	3,670	[1]	9,417	4,529,643
Female	2,378,728	1,631,663	236,504	3,731	[1]	7,680	4,258,306
1931—							
Male	3,179,444	2,033,240	148,954	4,049	[1]	8,854	5,374,541
Female	2,771,968	1,937,950	288,641	3,392	[1]	294	5,002,245
1871—	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Male	67·10	30·78	2·12	–	–	–	100
Female	63·85	31·51	4·64	–	–	–	100
1881—							
Male	66·12	31·55	2·33	–	–	–	100
Female	62·59	32·28	5·13	–	–	–	100
1891—							
Male	65·09	32·36	2·55	–	–	–	100
Female	61·19	33·37	5·44	–	–	–	100
1901—							
Male	63·55	33·76	2·68	·01	–	–	100
Female	59·71	34·51	5·77	·01	–	–	100
1911—							
Male	62·00	34·85	2·33	·02	·03	·76	100
Female	57·37	36·97	5·31	·02	·05	·28	100
1921—							
Male	59·58	37·49	2·64	·08	[1]	·21	100
Female	55·86	38·32	5·55	·09	[1]	·18	100
1931—							
Male	59·16	37·83	2·77	·08	[1]	·16	100
Female	55·41	38·74	5·77	·07	[1]	·01	100

[1] Legally separated included with divorced.

12.—Conjugal Condition of the People of Canada Classified as Single, Married, Widowed, Divorced,[1] and Not Given, by Provinces and Sex, 1931.

Province.	Males.					
	Single.	Married.	Widowed.	Divorced.[1]	Not Given.	Total.
Prince Edward Island	27,820	15,886	1,667	15	4	45,392
Nova Scotia	160,044	94,181	8,638	170	71	263,104
New Brunswick	129,407	72,577	6,453	146	37	208,620
Quebec	910,618	494,136	41,538	345	487	1,447,124
Ontario	962,790	731,191	52,223	1,071	1,569	1,748,844
Manitoba	221,183	137,568	8,671	344	299	368,065
Saskatchewan	315,196	173,610	10,024	394	711	499,935
Alberta	242,542	147,549	8,807	621	680	400,199
British Columbia	204,961	163,730	10,615	921	4,992	385,219
Yukon	1,857	807	140	17	4	2,825
Northwest Territories	3,026	2,005	178	5	–	5,214
Canada	**3,179,444**	**2,033,240**	**148,954**	**4,049**	**8,854**	**5,374,541**

Province.	Females.					
	Single.	Married.	Widowed.	Divorced.[1]	Not Given.	Total.
Prince Edward Island	23,611	15,695	3,327	13	–	42,646
Nova Scotia	138,027	92,807	18,764	138	6	249,742
New Brunswick	115,368	71,699	12,422	109	1	199,599
Quebec	877,075	478,694	70,909	405	48	1,427,131
Ontario	859,594	703,232	118,840	1,015	158	1,682,839
Manitoba	184,410	131,078	16,264	309	13	332,074
Saskatchewan	242,039	164,779	14,747	273	12	421,850
Alberta	179,961	137,810	13,234	393	8	331,406
British Columbia	148,909	139,655	19,701	731	48	309,044
Yukon	699	618	85	3	–	1,405
Northwest Territories	2,275	1,883	348	3	–	4,509
Canada	**2,771,968**	**1,937,950**	**288,641**	**3,392**	**294**	**5,002,245**

[1] Includes "legally separated".

13.—Conjugal Condition of the People, 15 Years of Age and Over, 1931.

Age Period and Sex.	Total Population.	Single.		Married.		Widowed.		Divorced.[1]	Unknown.
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Number.
15-19—									
Males	525,250	523,338	99·64	1,761	0·34	11	0·00	–	140
Females	514,341	488,115	94·90	26,079	5·07	122	0·02	15	10
20-24—									
Males	463,722	396,576	85·52	66,031	14·24	445	0·10	63	607
Females	447,463	282,469	63·13	163,552	36·55	1,229	0·27	199	14
25-29—									
Males	409,976	213,745	52·14	193,652	47·23	1,832	0·45	259	488
Females	376,305	121,749	32·35	250,870	66·67	3,235	0·86	437	14
30-34—									
Males	368,135	106,923	29·04	256,567	69·69	3,487	0·95	424	734
Females	340,701	63,619	18·67	270,033	79·26	6,497	1·91	533	19
35-39—									
Males	359,081	69,889	19·46	281,737	78·46	5,747	1·60	517	1,191
Females	329,382	44,701	13·57	272,293	82·67	11,781	3·58	592	15
40-44—									
Males	347,763	54,136	15·57	282,949	81·36	8,769	2·52	624	1,285
Females	298,336	33,776	11·32	246,927	82·77	17,081	5·73	534	18
45-49—									
Males	321,513	44,941	13·98	262,973	81·79	11,858	3·69	623	1,118
Females	263,698	27,107	10·28	214,712	81·42	21,463	8·14	386	30
50-54—									
Males	267,332	35,352	13·22	216,276	80·90	14,244	5·33	508	952
Females	221,349	23,426	10·58	171,190	77·34	26,438	11·94	271	24

[1] Includes "legally separated".

13.—Conjugal Condition of the People, 15 Years of Age and Over, 1931—concluded.

Age Period.	Total Population.	Single.		Married.		Widowed.		Divorced[1]	Unknown.
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Number.
55-59—									
Males	199,160	24,917	12·51	158,443	79·56	14,691	7·38	367	742
Females	167,865	17,960	10·70	121,085	72·13	28,625	17·05	175	20
60-64—									
Males	156,912	19,230	12·26	120,281	76·66	16,731	10·66	290	380
Females	137,685	15,499	11·26	87,537	63·58	34,518	25·07	108	23
65-69—									
Males	120,695	13,746	11·39	88·024	72·93	18·647	15·45	180	98
Females	110,439	11,930	10·80	59,326	53·72	39,104	35·41	68	11
70-74—									
Males	88,581	9,659	10·90	58,964	66·57	19,814	22·37	118	26
Females	83,019	9,139	11·01	33,984	40·94	39,846	48·00	41	9
75-79—									
Males	50,017	4,649	9·29	29,456	58·89	15,845	31·68	52	15
Females	48,612	5,198	10·69	14,147	29·10	29,238	60·15	23	6
80-84—									
Males	23,877	1,924	8·06	11,586	48·52	10,337	43·29	21	9
Females	25,294	2,823	11·16	4,370	17·28	18,089	71·51	6	6
85-89—									
Males	8,665	617	7·12	3,291	37·98	4,753	54·85	2	2
Females	10,464	1,095	10·46	1,124	10·74	8,238	78·73	4	3
90-94—									
Males	2,051	161	7·85	569	27·74	1,321	64·41	–	–
Females	2,881	291	10·10	190	6·59	2,400	83·30	–	–
95-99—									
Males	417	34	8·15	111	26·62	272	65·23	–	–
Females	656	69	10·52	36	5·49	551	83·99	–	–
100 and over—									
Males	74	7	9·46	20	27·03	47	63·51	–	–
Females	89	11	12·36	3	3·37	75	84·27	–	–
Age not given—									
Males	2,711	992	36·59	549	20·25	103	3·80	1	1,066
Females	1,060	406	38·30	471	44·43	111	10·47	–	72
Totals, 15 years and over—[2]									
Males	3,713,221	1,519,844	40·93	2,032,691	54·74	148,851	4·01	4,048	7,787
Females	3,378,579	1,148,977	34·01	1,937,458	57·35	288,530	8·54	3,392	222
Totals, All Ages	**10,376,786**	**5,951,412**	**57·35**	**3,971,190**	**38·27**	**437,595**	**4·22**	**7,441**	**9,148**
Males	5,374,541	3,179,444	59·16	2,033,240	37·83	148,954	2·77	4,049	8,854
Females	5,002,245	2,771,968	55·41	1,937,950	38·74	288,641	5·77	3,392	294

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[1] Includes "legally separated".

[2] Exclusive of ages not given.

Section 4.—Age Distribution.

The same causes which have in the past rendered the sex distribution of population in Canada somewhat unusual have also affected its age distribution. In the first stages of the settlement of a new colony, men in the prime of life constitute the bulk of the population, and women and children are conspicuous by their absence, so that there will be a disproportionately large male population between the ages of 20 and 50, together with a low birth rate. Later on in the settlement of a new country where there is land and food for all and where the early disproportion of the sexes has been overcome, there is a very high rate of natural increase, and an extraordinarily large proportion of children among the population. Thus in 1871 (see Table **14**), 286·91 out of every 1,000 of the population of Canada were children under 10 years of age and over half the total population (526·76 out of every 1,000) were under 20 years of age. But with the growing urbanization of population, the average age at marriage increased and children came to be regarded as a liability rather than an asset. Thus in 1911, out of every 1,000 of the population, only 231·83 were under 10 years of age and 423·42 under 20 years of age. In 1921, however, 239·67 per 1,000 of the population were under 10 years of age and 434·81 per 1,000 under 20 years. In 1931, the number of children under 10 years of age had dropped to 212·51 per 1,000 of the population, and of persons under 20 to 416·20 per 1,000.

Table **15** shows the varying age distribution of the population of the different provinces, while Table **16** gives details of the age distribution of the population of the Dominion, by sex, for the census years 1881 to 1931.

14.—Proportion per 1,000 of the Population by Age Periods, 1871, 1881, 1891, 1901, 1911, 1921 and 1931.

Age Period.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
Under 1 year	30·567	28·019	24·923	24·497	25·734	23·858	19·531
1— 4 years	115·649	108·507	99·964	95·210	97·413	96·482	84·009
5— 9 "	140·691	128·251	121·242	114·664	108·685	119·333	109·162
10—19 "	239·854	227·404	219·710	210·906	191·585	195·138	203·689
20—29 "	171·436	175·957	178·080	173·549	189·335	159·041	163·583
30—39 "	111·404	113·099	122·080	129·259	141·938	146·247	134·656
40—49 "	79·995	83·817	88·441	98·494	100·071	109·481	118·660
50—59 "	54·788	58·087	62·360	67·886	69·121	73·082	82·463
60 and over	55·128	63·270	70·142	76·397	71·027	74·917	83·882
Not given	0·488	13·589	13·059	9·137	5·090	2·419	0·363

15.—Proportion per 1,000 of the Population by Age Periods, by Provinces, 1931, with Totals for 1921.

Province.	0-9 Years.	10-19 Years.	20-44 Years.	45-69 Years.	70 Years and Over.	Age Not Given.
Prince Edward Island	212·47	207·97	308·15	206·52	64·81	0·08
Nova Scotia	215·36	214·17	320·93	198·39	50·93	0·22
New Brunswick	239·83	219·63	317·25	181·18	41·95	0·17
Quebec	245·89	214·20	352·95	157·69	29·05	0·23
Ontario	186·68	185·67	373·92	212·28	41·20	0·25
Manitoba	203·29	219·27	365·99	185·52	25·72	0·20
Saskatchewan	234·80	228·98	353·08	163·81	19·12	0·21
Alberta	217·98	210·00	374·07	178·47	19·32	0·16
British Columbia	160·07	175·97	377·16	254·66	29·97	2·17
Canada, 1931[1]	**212·70**	**203·69**	**360·50**	**189·52**	**33·22**	**0·36**
Canada, 1921[1]	**239·67**	**195·14**	**365·27**	**169·38**	**28·12**	**2·42**

[1] The statistics for Yukon and the Northwest Territories are included in the totals.

16.—Male and Female Population of Canada by Age Periods, 1881, 1891, 1901, 1911, 1921 and 1931.

Age Period.	1881.			1891.			1901.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year.....	61,704	59,473	121,177	61,308	59,149	120,457	66,464	65,116	131,580
1 year...........	50,298	48,288	98,586	52,160	50,833	102,993	62,384	61,203	123,587
2 years..........	65,187	63,069	128,256	65,465	63,898	129,363	65,245	64,182	129,427
3 years..........	62,217	60,455	122,672	63,854	62,047	125,901	64,748	64,158	128,906
4 years..........	60,616	59,144	119,760	63,328	61,563	124,891	65,455	64,030	129,485
Totals, Under 5 Years....	**300,022**	**290,429**	**590,451**	**306,115**	**297,490**	**603,605**	**324,296**	**318,689**	**642,985**
5 to 9 years....	281,216	273,446	554,662	297,385	288,605	585,990	311,134	304,765	615,899
10 to 14 "	259,154	247,728	506,882	279,889	269,287	549,176	295,674	284,665	580,339
15 to 19 "	237,317	239,281	476,598	258,325	254,412	512,737	280,275	272,228	552,503
20 to 24 "	211,634	217,771	429,405	237,144	235,913	473,057	256,981	251,823	508,804
25 to 29 "	165,339	166,236	331,575	194,531	193,115	387,646	216,334	207,051	423,385
30 to 34 "	131,051	129,538	260,589	163,866	155,724	319,590	188,125	174,942	363,067
35 to 39 "	115,029	113,515	228,544	139,899	130,551	270,450	172,553	158,673	331,226
40 to 44 "	97,807	95,537	193,344	118,954	112,685	231,639	152,036	137,822	289,858
45 to 49 "	86,784	82,364	169,148	100,827	94,992	195,819	125,636	113,550	239,186
50 to 54 "	72,046	68,762	140,808	87,861	83,565	171,426	106,107	97,857	203,964
55 to 59 "	57,379	53,027	110,406	66,887	63,089	129,976	82,136	78,535	160,671
60 to 64 "	52,006	45,354	97,360	62,819	57,403	120,222	72,807	68,156	140,963
65 to 69 "	36,544	32,052	68,596	44,717	40,172	84,889	54,497	51,176	105,673
70 to 74 "	26,158	23,453	49,611	32,941	29,906	62,847	39,086	37,294	76,380
75 to 79 "	16,361	14,649	31,010	20,047	17,864	37,911	24,548	23,248	47,796
80 to 84 "	9,251	8,307	17,558	10,798	10,151	20,949	13,090	12,740	25,830
85 to 89 "	3,344	3,151	6,495	4,160	4,390	8,550	4,848	4,990	9,838
90 to 94 "	987	1,094	2,081	1,360	1,436	2,796	1,356	1,554	2,910
95 to 99 "	330	379	709	411	437	848	423	538	961
100 and over.....	99	110	209						
Not given........	28,996	29,773	58,769	31,535	31,581	63,116	29,766	19,311	49,077
Totals, Population.....	**2,188,854**	**2,135,956**	**4,324,810**	**2,460,471**	**2,372,768**	**4,833,239**	**2,751,708**	**2,619,607**	**5,371,315**

Age Period.	1911.			1921.			1931.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year.....	93,513	91,946	185,459	105,941	103,725	209,666	102,930	99,738	202,668
1 year...........	87,399	86,002	173,401	104,562	103,209	207,771	102,879	101,486	204,365
2 years..........	90,697	88,943	179,640	105,801	104,144	209,945	111,910	109,668	221,578
3 years..........	89,688	87,730	177,418	108,415	106,203	214,618	113,021	111,110	224,131
4 years..........	86,922	84,643	171,565	108,671	106,878	215,549	112,432	109,241	221,673
Totals, Under 5 Years....	**448,219**	**439,264**	**887,483**	**533,390**	**524,159**	**1,057,549**	**543,172**	**531,243**	**1,074,415**
5 to 9 years....	395,045	388,207	783,252	528,663	520,031	1,048,694	572,507	560,242	1,132,749
10 to 14 "	354,911	345,401	700,312	461,282	451,805	913,087	542,930	531,121	1,074,051
15 to 19 "	351,244	329,129	680,373	403,235	398,545	801,780	525,250	514,341	1,039,591
20 to 24 "	385,855	320,435	706,290	350,971	360,198	711,169	463,722	447,463	911,185
25 to 29 "	370,494	287,684	658,178	347,622	338,852	686,474	409,976	376,305	786,281
30 to 34 "	310,339	244,777	555,116	343,237	309,608	652,845	368,135	340,701	708,836
35 to 39 "	257,875	209,904	467,779	342,300	290,066	632,366	359,081	329,382	688,463
40 to 44 "	213,018	176,677	389,695	286,451	240,651	527,102	347,763	298,336	646,099
45 to 49 "	178,715	152,768	331,483	236,884	198,129	435,013	321,513	263,698	585,211
50 to 54 "	152,718	132,366	285,084	195,133	166,811	361,944	267,332	221,349	488,681
55 to 59 "	112,952	100,096	213,048	148,133	132,163	280,296	199,160	167,865	367,025
60 to 64 "	94,318	83,786	178,104	126,397	112,881	239,278	156,912	137,685	294,597
65 to 69 "	67,626	63,523	131,149	90,615	81,381	171,996	120,695	110,439	231,134
70 to 74 "	47,807	46,197	94,004	60,579	56,846	117,425	88,581	83,019	171,600
75 to 79 "	30,266	29,260	59,526	35,583	35,767	71,350	50,017	48,612	98,629
80 to 84 "	15,550	15,921	31,471	18,136	19,465	37,601	23,877	25,294	49,171
85 to 89 "	6,184	6,687	12,871	7,142	8,236	15,378	8,665	10,464	19,129
90 to 94 "	1,693	2,010	3,703	1,800	2,380	4,180	2,051	2,881	4,932
95 to 99 "	417	502	919	412	565	977	417	656	1,073
100 and over.....	62	58	120	90	93	183	74	89	163
Not given........	26,687	9,996	36,683	11,588	9,674	21,262	2,711	1,060	3,771
Totals, Population.....	**3,821,995**	**3,384,648**	**7,206,643**	**4,529,643**	**4,258,306**	**8,787,949**	**5,374,541**	**5,002,245**	**10,376,786**

Section 5.—Racial Origins.

In six out of the seven censuses of Canada since Confederation the racial origin of each person has been secured, the exception being in 1891. The object of this information is to ascertain from what basic ethnic stocks the Canadian population, more particularly the recently immigrated population, is derived. The answer "Canadian" is not accepted under this heading, as the purpose of the question is to obtain, in so far as possible, a definition of "Canadian" in terms of racial derivation. Of this procedure of the census, criticism has been received on two main grounds: (*a*) that there are Canadians whose family is of several generations residence in the country who may not know their ultimate racial origin, or who may be of very mixed racial origin; and (*b*) that the practice tends to perpetuate racial distinctions which it is desirable to obliterate. As against these criticisms the following three points must be considered: (*a*) that the Canadian whose family is of three or more generations residence is enumerated and differentiated through the question on the birth place of parents above described; (*b*) that notwithstanding the desirability of racial assimilation, there are special features in connection with the process that require appraisement and study; for example, 271 children of Chinese fathers and 842 of Japanese fathers were born in Canada in 1931. Again, the fact that the constitution of Canada is based on the presence of two dominant races points to the desirability of a measurement of these factors; only recently it has been widely pointed out that the original French colony, numbering 75,000 at the date of the Conquest, has expanded to over three millions to-day; measurements of this kind would be impossible if the answer "Canadian" instead of "French" were accepted under the heading of racial origin, yet undoubtedly if the descendants of the original French colonists are not "Canadians", no one is; (*c*) finally, racial origin is an important subject for study in a "new" country like Canada from a scientific standpoint, *i.e.*, from the standpoint of the student of ethnology, criminology, and the social and "biometric" sciences in general.

To accept the answer "Canadian" to the question on racial origin would confuse the data and defeat the purpose for which the question is asked.

Racial Distribution.—The total increase in population over the decade 1921-31 was 1,588,837. The population of English origin increased by only 196,061 compared with 722,208 in the previous decade; that of Scottish origin by 172,725 compared with 175,745; and that of Irish origin by 123,005 compared with 57,419. The population of British origin, taken together, increased from 4,868,738 to 5,381,071, or by 512,333, between 1921 and 1931. This represented 32 p.c. of the total increase as compared with 61 p.c. of the total increase for the previous decade. On the other hand the population of French origin increased from 2,452,743 in 1921 to 2,927,990 in 1931, or by 475,247 (slightly under 30 p.c. of the total increase for the decade) and showed the greatest absolute increase for any decade since 1871. Figures for the minor racial groups which make up the nation (see Table **17**) would indicate that the people of Scandinavian, German and Ukrainian origins increased between 1921 and 1931 by 36 p.c., 61 p.c. and 111 p.c., respectively. Owing to the new national and racial alignments in Central and Southeastern Europe following the Great War, comparison of the post-war numerical strength of certain ethnic stocks in Canada with pre-war returns cannot be made with any certainty. For example a number of people reported as of Ukrainian stock in the seventh census were described in the censuses of 1921 and 1911 as Galician, Bukovinian, Ruthenian or Russian.

A perspective of the actual relationship of the origin groups to the population as a whole is obtained by a study of Table **18** where the proportion which the people of each origin bear to total population is given for each census for which the figures are available. Here it is clearly seen that the relative position of the English group showed substantial improvement up to 1921 (when for the first time it superseded the French) but, for 1931, there was a decided check. The French group, on the other hand, which showed a gradual decline between 1871 and 1901 and a more pronounced one in 1911 and 1921, has improved its relative position considerably and in 1931 is once again the foremost single racial group.

Together the British and French groups now constitute 80 p.c. of the total population, compared with 83 p.c. in 1921 and 1911, 88 p.c. in 1901, 89 p.c. in 1881 and no less than 92 p.c. in 1871.

The pronounced decline after 1901 in the combined proportion of the two major racial groups, *viz.*, British and French, with a corresponding increase in ethnic stocks of minor importance, has in the main been due to the immigration of continental Europeans to Canada during the past thirty years. Altogether, the percentage of the total population of European racial origin, other than British and French, increased from 8·50 p.c. of the total in 1901, to 12·82 p.c. in 1911, to 14·16 p.c. in 1921, and to 17·59 p.c. in 1931.

Oriental immigration to Canada in the past thirty years has been responsible for the relative increase of the Chinese and Japanese racial groups from 0·41 p.c. in 1901 to 0·67 p.c. in 1931. In the same period the population of Negro origin has declined from 0·32 p.c. to 0·19 p.c. of the total, and that of Indian and Eskimo origin from 2·38 p.c. to 1·24 p.c.

The racial origin of the population of Canada, by provinces and territories, is given in Table **19** for the census of 1931.

17.—Origins of the People according to the Censuses of 1871, 1881, 1901, 1911, 1921 and 1931.

NOTE.—Origins were not taken in the census of 1891. N.o.p.=Not otherwise provided for.

Origin.	1871.[3]	1881.	1901.	1911.	1921.	1931.
British—	No.	No.	No.	No.	No.	No.
English	706,369	881,301	1,260,899	1,823,150	2,545,358	2,741,419
Irish	846,414	957,403	988,721	1,050,384	1,107,803	1,230,808
Scottish	549,946	699,863	800,154	997,880	1,173,625	1,346,350
Other	7,773	9,947	13,421	25,571	41,952	62,494
Totals, British	**2,110,502**	**2,548,514**	**3,063,195**	**3,896,985**	**4,868,738**	**5,381,071**
French	1,082,940	1,298,929	1,649,371	2,054,890	2,452,743	2,927,990
Austrian, n.o.p	–	–	10,947	42,535	107,671	48,639
Belgian	–	–	2,994	9,593	20,234	27,585
Bulgarian and Roumanian	–	–	354	5,875	15,235	32,216
Chinese	–	4,383	17,312	27,774	39,587	46,519
Czech (Bohemian and Moravian)	–	–	–	–	8,840	30,401
Dutch	29,662	30,412	33,845	54,986	117,505	148,962
Finnish	–	–	2,502	15,497	21,494	43,885
German	202,991	254,319	310,501	393,320	294,635	473,544
Greek	–	–	291	3,594	5,740	9,444
Hebrew	125	667	16,131	75,681	126,196	156,726
Hungarian	–	–	1,549	11,605	13,181	40,582
Indian and Eskimo[1]	23,037	108,547	127,941	105,492	113,724	128,890
Italian	1,035	1,849	10,834	45,411	66,769	98,173
Japanese	–	–	4,738	9,021	15,868	23,342
Negro	21,496	21,394	17,437	16,877	18,291	19,456
Polish	–	–	6,285	33,365	53,403	145,503
Russian	607	1,227	19,825	43,142	100,064	88,148
Scandinavian[2]	1,623	5,223	31,042	107,535	167,359	228,049
Ukrainian	–	–	5,682	74,963	106,721	225,113
Yugoslavic	–	–	–	–	3,906	16,174
Various	4,182	8,540	7,000	31,157	28,796	27,476
Unspecified	7,561	40,806	31,539	147,345	21,249	8,898
Grand Totals	**3,485,761**	**4,324,810**	**5,371,315**	**7,206,643**	**8,787,949**	**10,376,786**

For footnotes see end of Table 18, p. 119.

18.—Percentage which the People of Each Origin Formed of the Total Population, According to the Censuses of 1871, 1881, 1901, 1911, 1921 and 1931.

Note.—Origins were not taken in the census of 1891. N.o.p.=Not otherwise provided for.

Origin.	Percentages of Total Population.					
	1871.[3]	1881.	1901.	1911.	1921.	1931.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
British—						
English	20·26	20·38	23·47	25·30	28·96	26·42
Irish	24·28	22·14	18·41	14·58	12·61	11·86
Scottish	15·78	16·18	14·90	13·85	13·35	12·97
Other	0·22	0·23	0·25	0·35	0·48	0·60
Totals, British	**60·55**	**58·93**	**57·03**	**54·07**	**55·40**	**51·86**
French	31·07	30·03	30·71	28·51	27·91	28·22
Austrian, n.o.p.	–	–	0·20	0·59	1·23	0·47
Belgian	–	–	0·06	0·13	0·23	0·27
Bulgarian and Roumanian	–	–	0·01	0·08	0·17	0·31
Chinese	–	0·10	0·32	0·39	0·45	0·45
Czech (Bohemian and Moravian)	–	–	–	–	0·10	0·29
Dutch	0·85	0·70	0·63	0·76	1·34	1·44
Finnish	–	–	0·05	0·22	0·24	0·42
German	5·82	5·88	5·78	5·46	3·35	4·56
Greek	–	–	0·01	0·05	0·07	0·09
Hebrew	–	0·02	0·30	1·05	1·44	1·51
Hungarian	–	–	0·03	0·16	0·15	0·39
Indian and Eskimo[1]	0·66	2·51	2·38	1·46	1·29	1·24
Italian	0·03	0·04	0·20	0·63	0·76	0·95
Japanese	–	–	0·09	0·13	0·18	0·22
Negro	0·62	0·49	0·32	0·23	0·21	0·19
Polish	–	–	0·12	0·46	0·61	1·40
Russian	0·02	0·03	0·37	0·60	1·14	0·85
Scandinavian[2]	0·05	0·12	0·58	1·49	1·90	2·20
Ukrainian	–	–	0·11	1·04	1·21	2·17
Yugoslavic	–	–	–	–	0·04	0·16
Various	0·12	0·20	0·13	0·43	0·33	0·26
Unspecified	0·22	0·94	0·59	2·04	0·24	0·09
Grand Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

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[1] Incomplete in 1871; includes "half-breeds" in 1901. [2] Includes Danish, Icelandic, Norwegian and Swedish; in 1921 they numbered respectively 21,124, 15,876, 68,856 and 61,503; in 1931, 34,118, 19,382, 93,243 and 81,306. [3] The figures for 1871 cover the four original provinces of Canada only.

19.—Racial Origins of the Population,

No.	Origin.	P. E. Island.	Nova Scotia.	New Brunswick.	Quebec.
		No.	No.	No.	No.
	Totals, Population	**88,038**	**512,846**	**408,219**	**2,874,255**
1	*British Races*	*73,758*	*391,878*	*255,567*	*432,726*
2	English	23,398	193,170	129,911	234,739
3	Irish	17,698	56,453	66,873	108,312
4	Scottish	32,489	139,992	56,561	87.300
5	Other	173	2,263	2,222	2,375
6	*Other European Races*	*13,779*	*109,486*	*148,627*	*2,418,209*
7	French	12,962	56,629	136,999	2,270,059
8	Austrian, n.o.p.	8	342	87	2,032
9	Belgian	4	631	193	4,324
10	Bulgarian	–	106	47	206
11	Czech and Slovak	4	452	19	4,430
12	Danish	124	771	1,499	1,740
13	Dutch	300	13,412	3,602	1,824
14	Finnish	1	99	135	2,973
15	German	282	27,098	2,659	10,616
16	Greek	1	294	78	2,460
17	Hebrew	20	2,046	1,262	60,087
18	Hungarian	4	580	53	4,018
19	Icelandic	1	5	–	30
20	Italian	28	1,897	405	24,845
21	Lithuanian	–	187	1	2,343
22	Norwegian	17	501	601	1,504
23	Polish	–	1,488	121	9,534
24	Roumanian	–	189	41	3,068
25	Russian	–	575	148	3,574
26	Swedish	20	576	525	1,658
27	Ukrainian	–	871	12	4,340
38	Yugoslavic	–	253	11	1,562
29	Other European	3	484	129	976
30	*Asiatic Races*	*166*	*1,559*	*873*	*7,034*
31	Chinese	31	340	231	2,750
32	Japanese	–	4	–	43
33	Other Asiatic	135	1,215	642	4,241
34	Eskimo	–	–	–	1,159
35	Indian	233	2,191	1,685	12,312
36	Negro	70	7,361	1,150	1,649
37	Various	–	20	5	154
38	Unspecified	32	351	312	1,012

Section 6.—Religions.

At each of the censuses from 1871 to 1931 every inhabitant of Canada has been asked to state the religious body of which he is a member or an adherent. During the sixty-year period there have been various fluctuations in the proportions of the population belonging to the leading religious bodies, and these fluctuations are, in a new country like this, largely occasioned by the religious affiliations of immigrants.

From Table **21**, it will be seen that throughout the sixty-year period something like two-fifths of the population of Canada has been of the Roman Catholic faith, the 1931 percentage, inclusive of Greek Catholics, being 41·30. Methodists were 16·27 p.c. of the population in 1871 but fell to 13·19 p.c. in 1921, while Presbyterians increased from 15·63 p.c. in 1871 to 16·04 p.c. in 1921, being reinforced by a considerable immigration from Scotland after the beginning of the century. The fusion of the Methodists and Congregationalists in 1925 with a large section of the Presbyterians, as the United Church of Canada, left that body the second largest religious body in the Dominion in 1931 with 19·44 p.c. of the population. The Presbyterians who did not adhere to the United Church of Canada numbered 8·39 p.c. of the population in 1931. The proportion of Anglicans in the population of Canada fell from 14·17 p.c. in 1871 to 12·69 p.c. in 1901 but thereafter the large immigration from the British Isles raised it to 16·02 p.c. in 1921, followed by a

by Provinces and Territories, Census of 1931.

Ontario.	Manitoba.	Saskat-chewan.	Alberta.	British Columbia.	Yukon.	Northwest Territories.	Canada.	No.
No	No.	No.	No.	No.	No.	No.	No.	
3,431,683	**700,139**	**921,785**	**731,605**	**694,263**	**4,230**	**9,723**	**10,376,786**	
2,539,771	*368,010*	*437,836*	*389,238*	*489,923*	*1,741*	*623*	*5,381,071*	**1**
1.319,612	172,992	205,519	188,456	272,501	825	296	2,741,419	**2**
647,831	77,559	104,096	79,978	71,612	298	98	1,230,808	**3**
549,648	112,326	121,485	110,720	135,038	576	215	1,346,350	**4**
22,680	5,133	6,736	10,084	10,772	42	14	62,494	**5**
837,469	*313,309*	*463,302*	*320,648*	*127,246*	*798*	*369*	*4,753,242*	**6**
299,732	47,039	50,700	38,377	15,028	250	215	2,927,990	**7**
9,607	8,858	17,061	6,737	3,891	14	2	48,639	**8**
7,310	6,323	4,458	2,726	1,597	16	3	27,585	**9**
2,415	36	126	146	76	2	–	3,160	**10**
8,871	2,396	5,056	6,404	2,756	9	4	30,401	**11**
4,718	3,235	6,630	11,403	3,945	34	19	34,118	**12**
60,241	24,957	24,695	13,665	6,234	26	6	148,962	**13**
27,137	1,013	2,313	3,318	6,858	34	4	43,885	**14**
174,006	38,078	129,232	74,450	16,986	98	39	473,544	**15**
4,195	295	534	601	977	3	–	9,444	**16**
62,383	19,341	5,116	3,722	2,743	4	2	156,726	**17**
13,786	1,955	13,363	5,502	1,313	8	–	40,582	**18**
326	13,450	3,841	870	858	–	1	19,382	**19**
50,536	2,379	1,040	4,766	12,254	22	1	98,173	**20**
1,521	370	529	678	245	1	1	5,876	**21**
5,172	5,263	39,755	27,360	12,943	108	19	93,243	**22**
42.384	40,243	25,961	21,157	4,599	12	4	145,503	**23**
8,267	2,087	9,530	4,712	1,162	–	–	29,056	**24**
10,050	11,573	35,421	16,381	10,398	14	14	88,148	**25**
10,544	9,449	22,458	19,828	16,108	112	28	81,306	**26**
24.426	73,606	63,400	55,872	2,583	2	1	225,113	**27**
8.100	291	1,686	1,335	2,911	20	5	16,174	**28**
1.742	1,072	397	638	781	9	1	6,232	**29**
12,297	*2,255*	*4,419*	*4,929*	*50,951*	*54*	*11*	*84,548*	**30**
6,919	1,732	3,501	3,875	27,139	1	–	46,519	**31**
220	51	114	652	22,205	52	1	23,342	**32**
5,158	472	804	402	1,607	1	10	14,687	**33**
–	62	–	3	–	85	4,670	5,979	**34**
30.368	15,417	15,268	15,249	24,599	1,543	4,046	122,911	**35**
6,886	465	410	924	533	8	–	19,456	**36**
287	43	27	45	96	–	4	681	**37**
4,605	578	523	569	915	1	–	8,898	**38**

slight falling off to 15·76 p.c. in 1931. The Baptists have shown a fairly steady decline from 6·87 p.c. in 1871 to 4·27 p.c. in 1931.

The immigration from non-English-speaking countries during the first three decades of the twentieth century has led to a great growth of the religious bodies whose members come from the continent of Europe. Thus the Lutherans, who were only 1·09 p.c. of the population in 1871 and 1·72 p.c. in 1901, have risen to 3·80 p.c. in 1931. The Jews again, who were only 0·03 p.c. in 1871 and 0·31 p.c. in 1901, were 1·50 p.c. in 1931. The adherents of the Greek Orthodox Church, who in earlier years were not distinguished from Greek Catholics (the two together being only 0·29 p.c. in 1901) were 0·99 p.c. in 1931.

Of the total population in 1931 (10,376,786), 16,042 or 0·15 p.c. did not state their religion while 54,164 or 0·52 p.c., persons belonging to small sects, were classed as "various" and 21,071 or 0·20 p.c. as of "no religion". Of the non-Christian sects, 155,614 or 1·50 p.c. were Jews, 24,087 or 0·23 p.c. were Confucians, 15,784 or 0·15 p.c. were Buddhists and 5,008 or 0·05 p.c. were pagans. The figures in the following tables are revised and final. In Table **20** the totals for each religion are brought together for all censuses since Confederation; Table **21** gives the same information as Table **20** in the form of percentages to total populations for the census years; Table **22** gives the 1931 census figures of the numbers of persons accredited to each of 31 specified religions, by provinces.

20.—Religions of the People at each Decennial Census, 1871-1931.

Religion.	1871.[6]	1881.	1891.	1901.	1911.	1921.	1931.
	No.	No.	No.	No.	No.	No.	No.
Adventist	6,179	7,211	6,354	8.058	10,406	14,179	16,026
Anglican	494,049	574,818	646,059	681,494	1,043,017	1,407,780	1,635.615
Baptist[1]	239,343	296,525	303,839	318,005	382,720	421,730	443,341
Brethren	2,305	8,831	11,637	8.014	9,278	11,580	13,472
Buddhist	–	–	–	10,407	10,012	11,281	15,784
Christian	–	–	–	7,484	17,421	17,142	11,527
Christian Science	–	–	–	2,619	5.073	13,826	18,436
Church of Christ, Disciples	–	20.193	12,763	17,164	14,554	13,107	15,811
Confucian	–	–	–	5,115	14,562	27,114	24,087
Congregationalist	21,829	26,900	28,157	28,293	34,054	30,730	694[2]
Doukhobor	–	–	–	8,775	10,493	12,648	14,913
Evangelical Association	–	–	–	10,193	10 595	13,905	22,213
Friends (Quaker)	7,345	6,553	4,650	4,100	4,027	3,149	2,424
Greek Church	–	–	–	15,630	88.507	169,832	[3]
Greek Orthodox	–	–	–	–	–	–	102,389[3]
Holiness Movement	–	–	–	2,775	3,856	3,245	4,436
International Bible Students	–	–	–	99	925	6,678	13,552
Jewish	1.115	2,393	6,414	16,401	74,564	125,197	155,614
Lutheran	37,935	46,350	63,982	92,524	229,864	286,458	394,194
Mennonite (inc. Hutterite)	–	–	–	31,797	44,625	58,797	88.736
Methodist	567,091	742,981	847,765	916,886	1,079,993	1,159,246	[2]
Mormon	–	–	–	6,891	15,971	19,622	22,005
No religion	5,146	2,634	[5]	4,810	26,027	21,739	21,071
Pagan	1,886	4,478	[5]	15,107	11,840	6,778	5,008
Pentecostal	–	–	–	–	513	7,003	26,301
Plymouth Brethren	–	–	–	3,040	3,438	6,482	6,983
Presbyterian	544,998	676,165	755,326	842,531	1,116,071	1,409,406	870,728[2]
Protestant	10,146	6,519	12,253	11,612	30,265	30,753	23,296
Roman Catholic	1,492,029	1,791,982	1,992,017	2,229.600	2,833,041	3,389,626	4,285,388[4]
Salvation Army	–	–	13,949	10,308	18,834	24,733	30,716
Unitarian	2,275	2,126	1,777	1,934	3,224	4.926	4,445
United Church	–	–	–	–	–	8,728[2]	2,017,375[2]
All other (various)	35,035	21,382	46,030	16,427	26,383	31,270	54,164
Not given	17,055	86,769	80,267	43,222	32,490	19,259	16,042
Totals	**3,485,761**	**4,324,810**	**4,833,239**	**5,371,315**	**7,206,643**	**8,787,949**	**10,376,786**

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[1] Including Tunkers. [2] Practically all Methodists and Congregationalists and a large number of Presbyterians united to form the United Church of Canada in 1925, although a relatively small number reported themselves as "United Church" in 1921, chiefly in Western Canada where the movement towards union began. [3] In earlier censuses only small numbers were involved, and Greek Catholics and Greek Orthodox were included under the general term "Greek Church". A rapid increase of both Greek Catholics and Greek Orthodox has been shown for recent censuses and, since the former owe obedience to the Pope in matters of faith, they have been included with the Roman Catholics for 1931. [4] Including 186,654 Greek Catholics, see footnote 3. [5] Included with "All other" religions for 1891. [6] The figures for 1871 cover the four original provinces of Canada only.

21.—Percentages of Specified Religions at each Decennial Census, 1871-1931.

Religion.	1871.[6]	1881.	1891.	1901.	1911.	1921.	1931.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Adventist	0·18	0·17	0·13	0·15	0·14	0·16	0·15
Anglican	14·17	13·29	13·37	12·69	14·47	16·02	15·76
Baptist	6·87	6·86	6·29	5·92	5·31	4·80	4·27
Brethren	0·07	0·20	0·24	0·15	0·13	0·13	0·13
Buddhist	–	–	–	0·19	0·14	0·13	0·15
Christian	–	–	–	0·14	0·24	0·20	0·11
Christian Science	–	–	–	0·05	0·07	0·13	0·18
Church of Christ, Disciples	–	0·47	0·26	0·32	0·20	0·15	0·15
Confucian	–	–	–	0·10	0·20	0·31	0·23
Congregationalist	0·63	0·62	0·58	0·53	0·47	0·35	0·01[2]
Doukhobor	–	–	–	0·16	0·15	0·14	0·14
Evangelical Association	–	–	–	0·19	0·15	0·16	0·21
Friends (Quaker)	0·21	0·15	0·10	0·08	0·06	0·04	0·02
Greek Church	–	–	–	0·29	1·23	1·93	[3]
Greek Orthodox	–	–	–	–	–	–	0·99[3]
Holiness Movement	–	–	–	0·05	0·05	0·04	0·04
International Bible Students	–	–	–	–	0·01	0·08	0·13
Jewish	0·03	0·06	0·13	0·31	1·03	1·42	1·50
Lutheran	1·09	1·07	1·32	1·72	3·19	3·26	3·80
Mennonite (inc. Hutterite)	–	–	[1]	0·59	0·62	0·67	0·86
Methodist	16·27	17·18	17·54	17·07	14·99	13·19	[2]
Mormon	–	–	–	0·13	0·22	0·22	0·21
No religion	0·15	0·06	[5]	0·09	0·36	0·25	0·20
Pagan	0·05	0·10	[5]	0·28	0·16	0·08	0·05
Pentecostal	–	–	–	–	0·01	0·08	0·25
Plymouth Brethren	–	–	–	0·06	0·05	0·07	0·07
Presbyterian	15·63	15·63	15·63	15·69	15·49	16·04	8·39[2]
Protestant	0·28	0·15	0·25	0·22	0·42	0·35	0·22
Roman Catholic	42·80	41·43	41·21	41·51	39·31	38·57	41·30
Salvation Army	–	–	0·29	0·19	0·26	0·28	0·30
Unitarian	0·07	0·05	0·04	0·04	0·04	0·06	0·04
United Church	–	–	–	–	–	0·10	19·44[2]
All other (various)	1·01	0·49	0·95	0·31	0·37	0·36	0·52
Not given	0·49	2·01	1·66	0·80	0·45	0·22	0·15
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**

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[1] Included with Baptists in 1891. [2] See footnote 2, Table **20**. [3] See footnote 3, Table **20**. [4] See footnote 4, Table **20**. [5] See footnote 5, Table **20**. [6] See footnote 6, Table **20**.

22.—Religions of the People, by

No.	Religion.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.
		No.	No.	No.	No.
	Totals, Population	**88,038**	**512,846**	**408,219**	**2,874,255**
1	Adventist	13	1,144	1,064	1,174
2	Anglican	5,074	88,738	48,931	149,843
3	Baptist	5,066	82,098	83,853	10,970
4	Brethren	–	96	336	757
5	Buddhist	–	2	3	73
6	Christadelphian	9	8	30	29
7	Christian	794	722	704	162
8	Christian Science	2	188	128	816
9	Church of Christ, Disciples	596	1,119	1,341	49
10	Confucian	3	44	62	1,121
11	Doukhobor	–	–	–	–
12	Evangelical Association	3	11	5	409
13	Friends	6	13	5	38
14	Greek Orthodox	6	315	75	8,992
15	Holiness Movement	–	1	10	276
16	International Bible Students	16	474	170	90
17	Jewish	19	1,935	1,257	59,736
18	Lutheran	76	7,949	969	8,261
19	Mennonite (inc. Hutterite)	2	1	–	8
20	Mormon	–	42	51	49
21	No Religion	30	342	128	1,621
22	Pagan	–	–	–	38
23	Pentecostal	188	637	1,767	1,214
24	Plymouth Brethren	2	83	43	509
25	Presbyterian	14,813	48,960	16,260	59,532
26	Protestant	20	372	143	11,279
27	Roman Catholic	39,105	162,754	188,098	2,463,160
28	Salvation Army	162	2,665	946	1,135
29	Unitarian	17	72	28	792
30	United Brethren in Christ	–	2	12	8
31	United Church	21,979	110,548	61,176	88,253
32	All other (Various)	31	1,053	496	1,836
33	Not given	6	458	128	2,025

Provinces, Census of 1931.

Ontario.	Manitoba.	Saskat-chewan.	Alberta.	British Columbia.	Yukon.	Northwest Territories.	Canada.	No.
No.	No.	No.	No.	No.	No.	No.	No.	
3,431,683	**700,139**	**921,785**	**731,605**	**694,263**	**4,230**	**9,723**	**10,376,786**	
2,353	897	3,381	4,213	1,786	1	–	16,026	**1**
764,130	128,385	126,837	112,979	205,047	2,299	3,352	1,635,615	**2**
171,305	13,483	22,613	30,496	23,395	44	18	443,341	**3**
7,640	675	1,099	1,192	1,677	–	–	13,472	**4**
110	33	88	366	15,074	35	–	15,784	**5**
1,364	102	77	136	377	–	1	2,133	**6**
4,302	367	1,098	2,315	875	6	182	11,527	**7**
6,957	1,797	1,039	2,075	5,418	14	2	18,436	**8**
8,359	1,136	1,601	1,251	358	–	1	15,811	**9**
1,590	760	1,231	1,728	17,548	–	–	24,087	**10**
7	131	7,956	786	6,033	–	–	14,913	**11**
17,225	307	2.034	2,133	85	–	1	22,213	**12**
1,602	66	212	200	281	–	1	2,424	**13**
16,387	15,774	31,126	26,427	3,274	8	5	102,389	**14**
3,185	94	539	252	79	–	–	4,436	**15**
4,486	2,316	3,152	1,252	1,596	–	–	13,552	**16**
62.094	19,193	5,047	3,663	2,666	2	2	155,614	**17**
97,022	46,892	113,676	82,411	36,635	239	64	394,194	**18**
17,661	30,352	31,338	8,289	1,085	–	–	88,736	**19**
6,184	228	1,607	13,185	655	3	1	22,005	**20**
3,418	2,629	2,504	2,188	7,855	45	311	21,071	**21**
1,625	390	1,150	496	69	33	1,207	5,008	**22**
8,152	3,441	4,970	3,655	2,277	–	–	26,301	**23**
3,186	591	432	528	1,608	1	–	6,983	**24**
450,664	55,720	67,954	72,069	84,183	432	141	870,728	**25**
3,286	1,479	1,734	1,931	2,653	38	361	23,296	**26**
744,740	189,693	233,979	168,408	90,852	667	3,932	4,285,388	**27**
16,701	2,266	2,015	2,024	2,801	–	1	30,716	**28**
1,244	1,178	328	294	491	–	1	4,445	**29**
1,369	23	65	124	44	–	–	1,647	**30**
973,768	176,240	243,399	176,816	164,750	352	94	2,017,375	**31**
24,829	2,973	6,451	6,700	6,670	2	37	51,078	**32**
4,738	528	1,053	1,023	6,066	9	8	16,042	**33**

Section 7.—Birthplaces.

The birthplaces of the population of Canada, as at each of the seven censuses, are shown by Canadian born, British born, and foreign born, (United States born and other foreign born) in Table **23.** The table shows that in 1871, 97·29 p.c. of the population was born under the British flag, while sixty years later the percentage had declined to 89·18. The proportion of Canadian born increased steadily until the opening of the century, but has declined as a result of the increase of immigration after 1900. The 1931 census shows declines in the proportions of British born and United States born as compared with 1921 but a substantial increase in the percentage of "other foreign born". The proportion of Canadian born has remained practically unchanged.

Worthy of note is the fairly steady increase of the United States-born population from 1·85 p.c. in 1871 to 4·26 p.c. in 1921, and the subsequent decline to 3·32 p.c. in 1931. Other foreign born increased from 0·92 p.c. in 1871 to 6·23 p.c. in 1911, declined to 5·87 p.c. of the total population by 1921 but, as already noted, increased substantially to 7·50 p.c. by 1931.

The birthplaces of the 1931 population are indicated by sex in Table **24,** for the various provinces and territories. In the Maritime Provinces, the population is shown by the census to be about 93 p.c. native born, and in Quebec about 91 p.c. In Ontario, however, the proportion sinks to about 77 p.c., in Manitoba to about 66 p.c., in Saskatchewan to about 65 p.c., in Alberta to about 58 p.c., and in British Columbia to about 54 p.c. The general tendency over the past decade has been for the proportion of the native-born population to remain stationary or show a slight decrease in Eastern Canada, but in Western Canada increases are everywhere shown; thus, the percentages in 1921 were: Maritime Provinces 93, Quebec 92, Ontario 78, Manitoba 64, Saskatchewan 60, Alberta 54 and British Columbia about 50. The proportion of foreign born has naturally decreased in the western provinces as a result of the limited immigration of recent years.

About 44 p.c. of the total British-born population is in Ontario, but the greatest proportion of British-born population in any one province is in British Columbia, *viz.,* 27 p.c. which compares with 31 p.c. for 1921. The foreign-born element reaches its maximum percentage in the rapidly growing provinces of Saskatchewan and Alberta, where it constitutes about 24 p.c. and 27 p.c. of the respective populations as compared with 26 p.c. and 30 p.c. respectively for 1921.

23.—Birthplaces of the Population of Canada, according to the Censuses of 1871-1931.

Year.	Canadian Born.	British Born.[1]	Foreign Born.		Total Population.	Percentages of Total Population.			
								Foreign Born.	
			Born in United States.	Born in other Foreign Countries.		Canadian Born.	British Born.	United States Born.	Other Foreign. Born.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
1871....	2,892,358	498,735	64,447	30,221	3,485,761	82·98	14·31	1·85	0·87
1881....	3,721,826	478,615	77,753	46,616	4,324,810	86·06	11·07	1·80	1·08
1891....	4,189,368	490,573	80,915	72,383	4,833,239	86·68	10·15	1·67	1·50
1901....	4,671,815	421,051	127,899	150,550	5,371,315	86·98	7·84	2·38	2·80
1911....	5,619,682	834,229	303,680	449,052	7,206,643	77·98	11·58	4·21	6·23
1921....	6,832,224	1,065,448	371,022	516,255	8,787,949	77·75	12·12	4·26	5·87
1931....	8,069,261	1,184,830	344,574	778,121	10,376,786	77·76	11·42	3·32	7·50

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[1] Includes some hundreds of persons born at sea.

24.—Population Classified by Sex and Nativity, by Provinces and Territories, 1931, with Totals for 1911 and 1921.

Province or Territory.	Totals.			Canadian Born.		British Born.		Foreign Born.	
	Male.	Female.	Both Sexes.	Male.	Female.	Male.	Fe-male.	Male.	Fe-male.
P.E. Island.....	45,392	42,646	88,038	43,907	41,344	615	545	870	757
Nova Scotia....	263,104	249,742	512,846	240,695	230,354	14,003	13,065	8,406	6,323
New Brunswick	208,620	199,599	408,219	195,908	187,910	6,732	5,980	5,980	5,709
Quebec........	1,447,124	1,427,131	2,874,255	1,311,893	1,310,619	56,248	54,578	78,983	61,934
Ontario........	1,748,844	1,682,839	3,431,683	1,311,792	1,315,606	273,129	253,441	163,923	113,792
Manitoba......	368,065	332,074	700,139	235,960	227,590	58,434	47,717	73,671	56,767
Saskatchewan	499,935	421,850	921,785	314,266	288,974	58,118	42,883	127,551	89,993
Alberta.........	400,199	331,406	731,605	221,207	204,660	61,207	47,558	117,785	79,188
British Columbia..........	385,219	309,044	694,263	194,047	180,687	102,209	87,515	88,963	40,842
Yukon..........	2,825	1,405	4,230	1,567	1,091	509	108	749	206
N. W. Territories	5,214	4,509	9,723	4,759	4,425	207	29	248	55
Canada, 1931..	**5,371,541**	**5,002,245**	**10,376,786**	**4,076,001**	**3,993,260**	**631,411**	**553,419**	**667,129**	**455,566**
" **1921**..	**4,529,643**	**4,258,306**	**8,787,949**	**3,443,109**	**3,389,115**	**567,068**	**498,380**	**519,466**	**370,811**
" **1911**..	**3,821,995**	**3,384,648**	**7,206,643**	**2,849,442**	**2,770,240**	**501,626**	**332,603**	**470,927**	**281,805**

Section 8.—Citizenship of the Foreign Born.

At the last four decennial censuses, those of 1901, 1911, 1921 and 1931, inquiry has been made into the citizenship of the foreign-born population. The relevant instructions to enumerators at the 1931 census were as follows:—

"The term 'Canadian' should be used as descriptive of every person whose home is in the country and who has rights of citizenship in Canada. Every person born in Canada should be entered as 'Canadian' unless he or she has subseqently become the citizen of another country. Similarly any person born in the United Kingdom or in any of the British Dominions or dependencies, who has not subsequently become the citizen of another country, and who is now permanently domiciled[1] in Canada, should be entered as 'Canadian'. Similarly also, any person born in the United States, France, Germany or any other foreign country, but whose home is now in Canada, and who has become a naturalized citizen of Canada, should be entered as 'Canadian'.

"An alien person should be classed . . . as of the nationality or citizenship of the country to which he or she professes to owe allegiance.

"A married woman is to be reported as of the same citizenship as her husband.

"A foreign-born child under 21 years of age is to be reported as of the same citizenship as the parents

"The law of Canada relating to nationality is contained in the Immigration Act, (Chapter 93, Revised Statutes of Canada, 1927) under which a 'Canadian' by nationality is defined as—

"(1) A person born in Canada who has not become an alien;

"(11) A British subject who has Canadian domicile;[1]

"(III) A person naturalized under the laws of Canada who has not subsequently become an alien or lost Canadian domicile.[1]

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[1] Canadian domicile can only be acquired for the purposes of the Immigration Act by a person having his domicile for at least five years in Canada after having been landed therein.

"... Following the participation of Canada in the Treaty of Versailles and in membership of the League of Nations, Canadian nationality was defined by Act of Parliament ('An Act to define Canadian Nationals and to provide for the Renunciation of Canadian Nationality', Chapter 21, Revised Statutes of Canada, 1927), as including:—

"(a) any British subject who is a Canadian citizen within the meaning of the Immigration Act, Chapter 27 of the Statutes of 1910 as heretofore amended.

"(b) the wife of any such person;

"(c) any person born out of Canada, whose father was a Canadian National at the time of that person's birth, or with regard to persons born before the passing of this Act, any person whose father at the time of such birth possessed all the qualifications of a Canadian National as defined in this Act.

"In connection with the last paragraph it should be noted that a child of Canadian parents domiciled in a foreign country retains Canadian nationality up to the age of 21 years, and should he become domiciled in Canada prior to that age does not require to be naturalized.

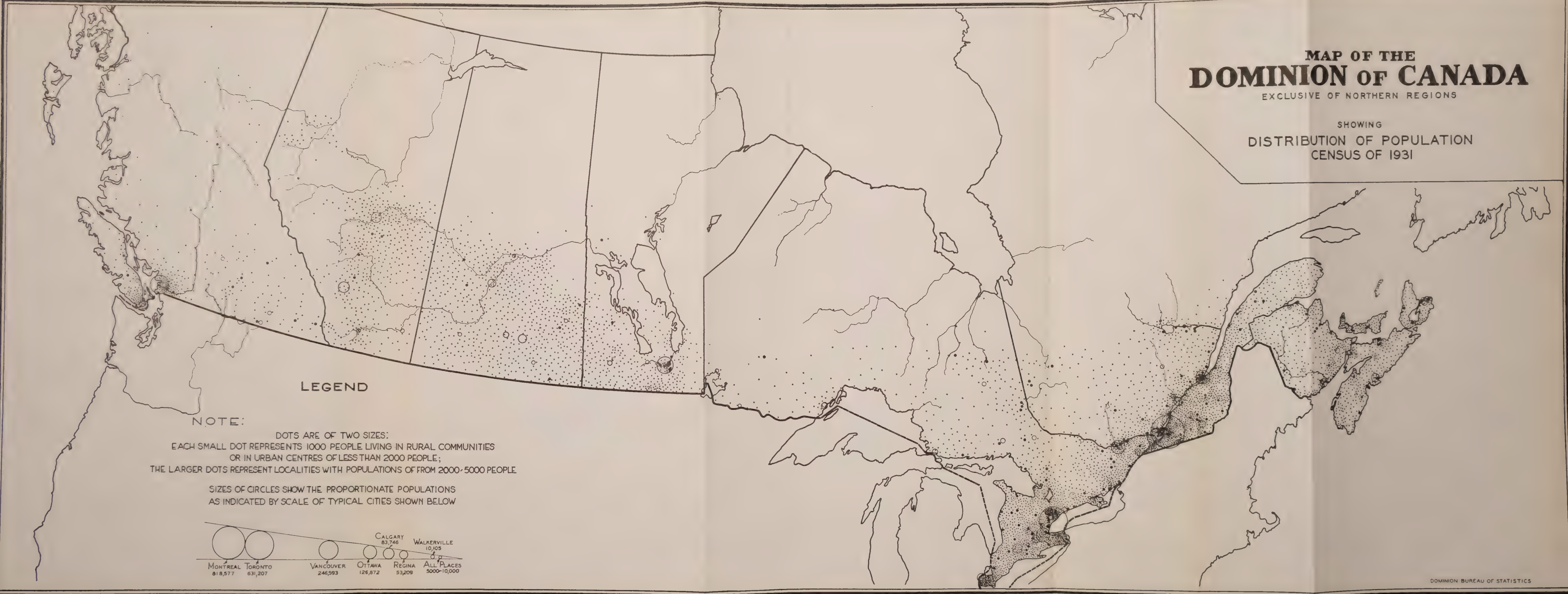
"It is proper to use the term 'Canadian' . . . when the information furnished by the individual conforms to the foregoing definitions and explanations."

The Progress of Naturalization.—The foreign-born residents of Canada numbered 1,122,695 in 1931 as compared with 890,277 in 1921, 752,732 in 1911 and 278,449 in 1901; among these the naturalized numbered 614,971 in 1931, 514,179 in 1921, 344,557 in 1911 and 153,908 in 1901, or 54·78 p.c., 57·75 p.c., 45·77 p.c. and 55·27 p.c. respectively. Alien residents in Canada showed an absolute decline between 1911 and 1921 of from 408,175 to 376,098, *i.e.*, from 5·66 p.c. of the population to 4·28 p.c. Between 1921 and 1931, they increased to 507,724, or 4·89 p.c. of the 1931 population. Among the foreign-born residents of Canada the United States born exceed those born in any other country, although by continental groups the Europeans are more numerous. Between 1921 and 1931 the U.S. born declined from 374,022 to 344,574, but there was a substantial net increase in the total foreign born due to the large increase of Europeans. On the other hand, the percentage of the U.S. born who are naturalized to total U.S. born has increased from 63·63 in 1921 to 72·44 in 1931, whereas the percentage of Europeans who are naturalized has fallen from 57·88 in 1921 to 49·13 in 1931.

Table **25** gives details of the naturalized and alien persons among the foreign-born residents of Canada. The table is divided into pre-war and post-war sections and, while the general totals are comparable throughout the thirty years, the individual totals for those European countries whose boundaries underwent change following the War are not comparable as between the 1901-11 and 1921-31 periods.

25.—Naturalized and Alien Persons among the Foreign-Born Residents of Canada, by Countries of Birth, Numbers and Percentages, 1901, 1911, 1921 and 1931.

Country of Birth.	PRE-WAR PERIOD.									
	1901.					1911.				
	Total Foreign Born.	Naturalized.		Alien.		Total Foreign Born.	Naturalized.		Alien.	
	No.	No.	p.c.	No.	p.c.	No.	No.	p.c.	No.	p.c.
Austria-Hungary	28,407	9,320	32·81	19,087	67·19	121,430	60,949	50·19	60,481	49·81
Belgium	2,280	1,296	56·84	984	43·16	7,975	3,265	40·94	4,710	59·06
China	17,043	668	3·92	16,375	96·08	27,083	2,578	9·52	24,505	90·48
Denmark	2,075	1,301	62·70	774	37·30	4,937	2,359	47·78	2,578	52·22
France	7,944	4,975	62·63	2,969	37·37	17,619	8,911	50·58	8,708	49·42
Germany	27,300	20,883	76·49	6,417	23·51	39,577	23,283	58·83	16,294	41·17
Greece	213	95	44·60	118	55·40	2,640	476	18·03	2,164	81·97
Holland	385	198	51·43	187	48·57	3,808	1,128	29·62	2,680	70·38
Iceland	6,057	4.013	66·25	2,044	33·75	7,109	5,864	82·49	1,245	17·51
Italy	6,854	1,692	24·69	5,162	75·31	34,739	6,900	19·86	27,839	80·14
Japan	4,674	1,062	22·72	3,612	77·28	8,425	1,898	22 53	6,527	77·47
Norway and Sweden	10,256	6,094	59·42	4,162	40·58	49,194	21,891	44·50	27,303	55·50
Roumania and Bulgaria	1,066	378	35·46	688	64·54	9,657	3,755	38·88	5,902	61·12
Russia	31,231	11,394	36·48	19,837	63·52	100,971	43,887	43·46	57,084	56·54
Turkey and Syria	1,579	481	30·46	1,098	69·54	4,768	1,889	39·62	2,879	60·38
United States	127.899	87,049	68·06	40,850	31·94	303,680	152,308	50·15	151,372	49·85
Other Countries	3,186	3,009	94·44	177	5·56	9,120	3,216	35·26	5,904	64·74
Totals	**278,449**	**153,908**	**55·27**	**124,541**	**44·73**	**752,732**	**344,557**	**45·77**	**408,175**	**54·23**



MAP OF THE DOMINION OF CANADA

EXCLUSIVE OF NORTHERN REGIONS

SHOWING

DISTRIBUTION OF POPULATION
CENSUS OF 1931

LEGEND

NOTE:

DOTS ARE OF TWO SIZES:
EACH SMALL DOT REPRESENTS 1000 PEOPLE LIVING IN RURAL COMMUNITIES
OR IN URBAN CENTRES OF LESS THAN 2000 PEOPLE;
THE LARGER DOTS REPRESENT LOCALITIES WITH POPULATIONS OF FROM 2000-5000 PEOPLE

SIZES OF CIRCLES SHOW THE PROPORTIONATE POPULATIONS
AS INDICATED BY SCALE OF TYPICAL CITIES SHOWN BELOW

MONTREAL 818,577
TORONTO 631,207
VANCOUVER 246,593
OTTAWA 126,872
CALGARY 83,746
REGINA 53,209
WALKERVILLE 10,105
ALL PLACES 5000-10,000

DOMINION BUREAU OF STATISTICS

25.—Naturalized and Alien Persons among the Foreign-Born Residents of Canada, by Countries of Birth, Numbers and Percentages, 1901, 1911, 1921 and 1931—concluded.

Country of Birth.	POST-WAR PERIOD.									
	1921.					1931.				
	Total Foreign Born.	Naturalized.		Alien.		Total Foreign Born.	Naturalized.		Alien.	
	No.	No.	p.c.	No.	p.c.	No.	No.	p.c.	No.	p.c.
Europe	459,325	265,865	57·88	193,460	42·12	714,462	351,013	49·13	363,449	50·87
Austria	57,535	34,171	59·39	23,364	40·61	37,391	22,409	59·93	14,982	40·07
Belgium	13,276	5,586	42·08	7,690	57·92	17,083	8,465	49·70	8,568	50·30
Bulgaria	1,005	225	22·39	780	77·61	1,467	699	47·65	768	52·35
Czechoslovakia	4,322	2,408	55·71	1,914	44·29	22,835	4,566	20·00	18,269	80·00
Denmark	7,192	4,052	56·34	3,140	43·66	17,217	5,374	31·21	11,843	68·79
Finland	12,156	5,558	45·72	6,598	54·28	30,354	8,695	28·65	21,659	71·35
France	19,247	10,615	55·15	8,632	44·85	16,756	11,082	66·14	5,674	33·86
Germany	25,266	16,649	65·89	8,617	34·11	39,163	18,437	47·08	20,726	52·92
Greece	3,769	1,105	29·32	2,664	70·68	5,579	3,500	62·74	2,079	37·26
Holland	5,827	2,820	48·40	3,007	51·60	10,736	3,957	36·86	6,779	63·14
Hungary	7,493	5,419	72·32	2,074	27·68	28,523	6,393	22·41	22,130	77·59
Iceland	6,776	5,852	86·36	924	13·64	5,731	5,221	91·10	510	8·90
Italy	35,531	10,739	30·22	24,792	69·78	42,578	26,744	62·81	15,834	37·19
Norway	23,127	16,570	71·65	6,557	28·35	32,679	18,466	56·51	14,213	43·49
Poland	65,304	38,461	58·90	26,843	41·10	171,169	80,235	46·87	90,934	53·13
Roumania	22,779	13,785	60·52	8,994	39·48	40,322	23,311	57·81	17,011	42·19
Russia	101,055	63,058	62·40	37,997	37,60	114,406	67,521	59·02	46,885	40·98
Sweden	27,700	18,679	67·43	9,021	32·57	34,415	20,565	59·76	13,850	40·24
Switzerland	3,479	1,876	53·92	1,603	46,08	6,076	2,513	41·36	3,563	58·64
Yugoslavia	1,946	655	33·66	1,291	66·34	17,110	3,370	19·70	13,740	80·30
Ukraine	11,357	6,216	54·73	5,141	45·27	13,759	6,145	44·66	7,614	55·34
Other	3,183	1,366	42·92	1,817	57·08	9,163	3,345	36·51	5,818	63·49
Asia	53,636	8,509	15·86	45,127	84·14	60,608	12,119	20·00	48,489	80·00
China	36,924	1,766	4·78	35,158	95·22	42,037	2,946	7·01	39,091	92·99
Japan	11,650	3,902	33·49	7,748	66·51	12,261	4,576	37·32	7,685	62·68
Syria	3,879	2,265	58·39	1,614	41·61	3,953	2,928	74·07	1,025	25·93
Turkey	401	187	46·63	214	53·37	921	660	71·66	261	28·34
Other	782	389	49·74	393	50·26	1,436	1,009	70·26	427	29·74
United States	374,022	237,993	63·63	136,029	36·37	344,574	249,595	72·44	94,979	27·56
Other Countries	3,294	1,812	55·01	1,482	44·99	3,051	2.244	73·55	807	26·45
Totals	**890,277**	**511.179**	**57·75**	**376,098**	**42·25**	**1,122,695**	**614,971**	**54·78**	**507,724**	**45·22**

Section 9.—Rural and Urban Population.

In Table **26** are given statistics showing the growth of rural and urban population respectively, by provinces, since 1891. For the purposes of the census the population residing in cities, towns and incorporated villages has been defined as urban, and that outside of such localities as rural. Thus the distinction here made between 'rural' and 'urban' population is a distinction of provincial legal status rather than of size of aggregations of population within limited areas. Since the laws of the various provinces differ in regard to the population necessary before a municipality may be incorporated as urban (the laws of Saskatchewan, for example, making provision that 50 people actually resident on an area not greater than 640 acres may claim incorporation as a village, while the Ontario law now requires that villages asking for incorporation shall have a population of 750 on an area not exceeding 500 acres), the line of demarcation between rural and urban population is not at all uniformly drawn throughout the Dominion, as far as comparable aggregations of population are concerned. To a limited extent, however, Table **28** will permit the student of population statistics to make, at least for Canada as a whole, his own line of demarcation between rural and urban populations.[1]

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[1] In the United States, urban population prior to 1930 was classified by the Census Bureau as that residing in cities and other incorporated places having 2,500 inhabitants or more with certain minor qualifications, but in 1930 the definition was slightly modified to include townships and other political divisions, not incorporated as municipalities, having a total population of 10,000 or more, and a population density of 1,000 or more per square mile each. The direct result of this modification has been to slightly increase the proportion of urban population.

While a summary comparison between urbanization in Canada in 1931 and in the United States in 1930 would lead us to the conclusion that our country, though far less densely peopled than the United States, had an almost equally large percentage of its population in urban communities, *viz.*, 53·70 p.c. in Canada as compared with 56·2 p.c in the United States, the fact that in the United States inhabitants of places having under 2,500 population are included with rural population must be taken into account. A fairer basis of comparison is secured if the same population limits are taken for both countries, as may be done by using Table **28.** Thus, at the census of 1930, the United States had 29·5 p.c. of its population resident in cities of 100,000 and over, while Canada in 1931 had only 22·44 p.c. of its population in such places. The United States had an additional 18 p.c of its population residing in cities of between 10,000 and 100,000 population, and 4·8 p.c. in cities and towns of 5,000 to 10,000, while Canada had in cities of these categories only 14·87 p.c., and 4·42 p.c. respectively of its population. Thus, taking all places of 5,000 and over—the lowest population for which comparative figures are readily available—52·3 p.c. of the population of the United States resided in such places as compared with 41·73 p.c. of the population of Canada, showing the much higher degree of urbanization which has been reached in the United States—a natural thing in an older settled and more densely peopled country.

On the basis of the census classification, it is apparent from Table **26** that in the last decade, as in the previous one, urban communities absorbed somewhat over two-thirds of the total increase in population, with the result that the urban population of Canada in 1931 exceeded the rural by 767,330. Out of every 1,000 persons in the country, 463 were resident, on June 1, 1931, in rural and 537 in urban communities, as compared with 505 in rural and 495 in urban communities on June 1, 1921; 546 in rural and 454 in urban communities in 1911; 625 in rural and 375 in urban communities in 1901; and 682 in rural and 318 in urban communities in 1891.

From Table **28,** showing the distribution of urban population in Canada by size of cities and towns, it is seen that Canada possesses two cities of more than half a million population. These are Montreal and Toronto, with 818,577 and 631,207 inhabitants respectively. Two other cities, Vancouver and Winnipeg, have attained the 200,000 mark and Hamilton, Quebec and Ottawa each have populations of over 100,000. The two western cities of Calgary and Edmonton are now in the 75,000 to 100,000 class. In this respect London, which excelled Edmonton in 1921, now takes the next lower place with a population of 71,148. Details of the population of these and other smaller cities and towns of 5,000 and over, are given by censuses from 1871 to 1931 in Table **29,** while the populations of urban communities having in 1931 a population of from 1,000 to 5,000 each, are given for 1901, 1911, 1921 and 1931 in Table **30.**

All the larger cities have in their neighbourhoods growing "satellite" towns or other densely settled areas in close economic relationship with the central municipality. This phenomenon is to-day of increasing importance largely as a result of the greater ease and speed of transportation by motor vehicle. It has therefore been considered advisable to calculate the total populations resident in what the United States census authorities call the "metropolitan areas" dependent upon each of the cities with 100,000 population or over. On this basis the total populations of the larger cities at the census of 1931 were as follows: "Greater Montreal", 1,000,157; "Greater Toronto", 808,864; "Greater Vancouver", 308,340; "Greater Winnipeg", 280,202; "Greater Ottawa" (including Hull), 175,988; "Greater Quebec", 166,435; and "Greater Hamilton", 163,710.

26.—Rural and Urban Populations, by Provinces and Territories, 1891, 1901, 1911, 1921 and 1931.

Province or Territory.	1891.		1901.		1911.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Prince Edward Island	94,823	14,255	88,304	14,955	78,758	14,970
Nova Scotia	373,403	76,993	330,191	129,383	306,210	186,128
New Brunswick	272,362	48,901	253,835	77,285	252,342	99,547
Quebec	988,820	499,715	994,833[6]	654,065[6]	1,038,934[6]	966,842[6]
Ontario	1,295,323	818,998	1,246,969	935,978	1,198,803[5]	1,328,489
Manitoba	111,498	41,008	184,775[3]	70,436[3]	261,029[4]	200,365
Saskatchewan	[1]	–	77,013[7]	14,266[7]	361,037[7]	131,395[7]
Alberta	[1]	–	54,489[2]	18,533[2]	236,633[2]	137,662[2]
British Columbia	60,945	37,228	88,478	90,179	188,796	203,684
Yukon	[1]	–	18,077	9,142	4,647	3,865
Northwest Territories	[1]	–	20,129	–	6,507[8]	–
Royal Canadian Navy	–	–	–	–	–	–
Canada	**3,296,141**	**1,537,098**	**3,357,093**	**2,014,222**	**3,933,696**	**3,272,947**

Province or Territory.	1921.		1931.		Numerical Increase in Decade 1921-31.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Prince Edward Island	69,522	19,093	67,653	20,385	−1,869	1,292
Nova Scotia	296,799	227,038	281,192	231,654	−15,607	4,616
New Brunswick	263,432	124,444	279,279	128,940	15,847	4,496
Quebec	1,038,096	1,322,569	1,060,649	1,813,606	22,553	491,037
Ontario	1,227,030	1,706,632	1,335,691	2,095,992	108,661	389,360
Manitoba	348,502	261,616	384,170	315,969	35,668	54,353
Saskatchewan	538,552	218,958	630,880	290,905	92,328	71,947
Alberta	365,550	222,904	453,097	278,508	87,547	55,604
British Columbia	277,020	247,562	299,524	394,739[10]	22,504	147,177
Yukon	2,851	1,306	2,870	1,360	19	54
Northwest Territories	7,988	–	9,723	–	1,735	–
Royal Canadian Navy	485	–	[9]	–	[9]	–
Canada	**4,435,827**	**4,352,122**	**4,804,728**	**5,572,058**	**368,901**	**1,219,936**

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[1] The population (93,967) in territory now comprised in the provinces of Alberta, Saskatchewan and in Yukon and the Northwest Territories was classified as rural in the census of 1891. [2] Vol. 1, Census 1911, places the urban population of Alberta for that year at 141,937. Included in this figure was the population (5,250) of twelve places which, according to the Report of the Municipal Commissioner for Alberta, were not then incorporated. The places so included were Aetna, Bankhead, Bellevue, Bickerdike, Canmore, Cardiff, Exshaw, Hillcrest, Passburg, Queenston and Elmpark. The correction resulting from this and from other small adjustments consequent upon more definite knowledge as to incorporated areas, places the urban population for 1911 at 137,662. Similar corrections have been made in the urban and rural figures for the census of 1901. [3] As corrected in Census Report, Prairie Provinces, 1916. [4] As changed by Extension of Boundaries Act, 1912. [5] As changed by Extension of Boundaries Act, 1912. [6] The urban population of 970,791, shown in Volume 1, Census 1911, is reduced to 966,842 by the transfer of the populations of Maniwaki, Martinville, Moisie, St. Bruno, St. Martin and St. Vincent de Paul from urban to rural by adjustments in area of the villages of Ste. Anne and Ste. Geneviève; and Extension of Boundaries Act, 1912. [7] Urban and rural populations for 1911 and 1901 are as corrected in Census Report, Prairie Provinces, 1916. [8] As reduced by Extension of Boundaries Act, 1912. [9] Members of the Royal Canadian Navy were counted at their homes in the census of 1931. [10] This includes South Vancouver and Point Grey, with 1921 populations of 32,267 and 13,736 respectively, which were then classified as 'rural'.

27.—Percentage Distribution of Rural and Urban Populations, by Provinces and Territories, 1891, 1901, 1911, 1921 and 1931.

Note.—In using this table, reference should be made to the notes appended to the preceding table showing rural and urban population by numbers.

Province or Territory.	1891.		1901.		1911.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Prince Edward Island	86·93	13·07	85·52	14·48	84·03	15·97
Nova Scotia	82·91	17·09	71·85	28·15	62·20	37·80
New Brunswick	84·78	15·22	76·66	23·34	71·71	28·29
Quebec	66·43	33·57	60·33	39·67	51·80	48·20
Ontario	61·26	38·74	57·12	42·88	47·43	52·57
Manitoba	73·11	26·89	72·40	27·60	56·57	43·43
Saskatchewan	[1]	–	84·37	15·63	73·32	26·68
Alberta	[1]	–	74·62	25·38	63·22	36·78
British Columbia	62·08	37·92	49·52	50·48	48·10	51·90
Yukon	[1]	–	66·41	33·59	54·59	45·41
Northwest Territories	[1]	–	100·00	–	100·00	–
Royal Canadian Navy	–	–	–	–	–	–
Canada	**68·20**	**31·80**	**62·50**	**37·50**	**54·58**	**45·42**

Province or Territory.	1921.		1931.	
	Rural.	Urban.	Rural.	Urban.
Prince Edward Island	78·45	21·55	76·85	23·15
Nova Scotia	56·66	43·34	54·83	45·17
New Brunswick	67·92	32·08	68·41	31·59
Quebec	43·97	56·03	36·90	63·10
Ontario	41·83	58·17	38·92	61·08
Manitoba	57·12	42·88	54·87	45·13
Saskatchewan	71·10	28·90	68·44	31·56
Alberta	62·12	37·88	61·93	38·07
British Columbia	52·81	47·19	43·14	56·86[2]
Yukon	68·58	31·42	67·85	32·15
Northwest Territories	100·00	–	100·00	–
Royal Canadian Navy	100·00	–	–	–
Canada	**50·48**	**49·52**	**46·30**	**53·70**

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[1] The population in the territory now comprised in Alberta, Saskatchewan, Yukon and the Northwest Territories was classified as rural in the census of 1891.

[2] South Vancouver and Point Grey, with populations in 1921 of 32,267 and 13,736 respectively, were then 'rural', but are 'urban' in 1931.

28.—Urban Populations of Canada, Divided by Size of Municipality Groups, 1911, 1921 and 1931.

In Cities, Towns or Villages of—	1911.			1921.			1931.		
	Number of Places.	Population.	Per cent of Total Pop.	Number of Places.	Population.	Per cent of Total Pop.	Number of Places.	Population.	Per cent of Total Pop.
Over 500,000	–	–	–	2	1,140,399	12·98	2	1,449,784	13·97
Between—									
400,000 and 500,000	1	490,504	6·81	–	–	–	–	–	–
300,000 and 400,000	1	381,833	5·30	–	–	–	–	–	–
200,000 and 300,000	–	–	–	–	–	–	2	465,378	4·48
100,000 and 200,000	2	236,436	3·28	4	518,298	5·90	3	413,013	3·98
50,000 and 100,000	3	247,221	3·43	5	336,650	3·83	7	470,443	4·53
25,000 and 50,000	7	272,071	3·78	7	239,096	2·72	10	339,521	3·27
15,000 and 25,000	11	193,977	2·69	19	370,990	4·22	23	457,292	4·41
10,000 and 15,000	18	225,423	3·13	18	224,033	2·55	23	275,944	2·66
5,000 and 10,000	44	313,100	4·34	54	382,762	4·36	68	458,784	4·42
3,000 and 5,000	59	222,274	3·08	72	272,720	3·10	71	273,276	2·63
1,000 and 3,000	250	428,250	5·94	293	492,116	5·60	324	557,466	5·37
500 and 1,000	241	174,781	2·43	290	215,648	2·45	322	231,375	2·23
Under 500	419	87,077	1·21	679	159,410	1·81	750	179,782	1·73
Totals	**1,056**	**3,272,947**	**45·42**	**1,443**	**4,352,122**	**49·52**	**1,605**	**5,572,058**	**53·70**

Population is shown in Table 28 to be increasingly attracted to the larger cities. Thus not only have cities of over 500,000 population (Montreal and Toronto) increased their proportions to the total, but cities of from 100,000 to 500,000 have increased their aggregate population from 5·90 p.c. of the total to 8·46 p.c., and cities of between 5,000 and 100,000 from 17·68 p.c. to 19·29 p.c. in the decade 1921-31. The classes below 5,000 show slight proportional reductions.

29.—Populations of Cities and Towns having over 5,000 Inhabitants in 1931, Compared with 1871-81-91-1901-11-21.

Note.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (*), and those in which there is a Chamber of Commerce by a dagger (†). In all cases the population for previous censuses has been rearranged as far as possible to cover the same area as in 1931.

City or Town.	Province.	Population:						
		1871.	1881.	1891.	1901.	1911.	1921.	1931.
*†Montreal	Quebec	130,833	177,377	256,723	328,172	490,504	618,506	818,577
*Toronto	Ontario	59,000	96,196	181,215	209,892	381,833	521,893	631,207
*Vancouver	British Columbia	–	–	13,709	29,432	120,847	163,220	246,593
*Winnipeg	Manitoba	241	7,985	25,639	42,340	136,035	179,087	218,785
†Hamilton	Ontario	26,880	36,661	48,959	52,634	81,969	114,151	155,547
*Quebec	Quebec	59,699	62,446	63,090	68,840	78,710	95,193	130,594
*Ottawa	Ontario	24,141	31,307	44,154	59,928	87,062	107,843	126,872
*Calgary	Alberta	–	–	3,876	4,392	43,704	63,305	83,761
*†Edmonton	Alberta	–	–	–	4,176	31,064	58,821	79,197
†London	Ontario	18,000	27,867	31,977	37,976	46,300	60,959	71,148
†Windsor	Ontario	4,253	6,561	10,322	12,153	17,829	38,591	63,108
†Verdun	Quebec	–	278	296	1,898	11,629	25,001	60,745
*Halifax	Nova Scotia	29,582	36,100	38,437	40,832	46,619	58,372	59,275
*Regina	Saskatchewan	–	–	–	2,249	30,213	34,432	53,209
*Saint John	New Brunswick	41,325	41,353	39,179	40,711	42,511	47,166	47,514
*Saskatoon	Saskatchewan	–	–	–	113	12,004	25,739	43,291
†Victoria	British Columbia	3,270	5,925	16,841	20,919	31,660	38,727	39,082
†Three Rivers	Quebec	7,570	8,670	8,334	9,981	13,691	22,367	35,450
*Kitchener	Ontario	2,743	4,054	7,425	9,747	15,196	21,763	30,793
*Brantford	Ontario	8,107	9,616	12,753	16,619	23,132	29,440	30,107
†Hull	Quebec	3,800	6,890	11,264	13,993	18,222	24,117	29,433
*Sherbrooke	Quebec	4,432	7,227	10,097	11,765	16,405	23,515	28,933
Outremont	Quebec	–	387	795	1,148	4,820	13,249	28,641
*Fort William	Ontario	–	693	2,176	3,633	16,499	20,541	26,277
†St. Catharines	Ontario	7,864	9,631	9,170	9,946	12,484	19,881	24,753
Westmount	Quebec	200	884	3,076	8,856	14,579	17,593	24,235
†Kingston	Ontario	12,407	14,091	19,263	17,961	18,874	21,753	23,439
†Oshawa	Ontario	3,185	3,992	4,066	4,394	7,436	11,940	23,439
*Sydney	Nova Scotia	1,700	2,180	2,427	9,909	17,723	22,545	23,089
†Sault Ste. Marie	Ontario	879	780	2,414	7,169	14,920	21,092	23,082
†Peterborough	Ontario	4,611	6,812	9,717	12,886	18,360	20,994	22,327
*Moose Jaw	Saskatchewan	–	–	–	1,558	13,823	19,285	21,299
†Guelph	Ontario	6,878	9,890	10,537	11,496	15,175	18,128	21,075
*Glace Bay	Nova Scotia	–	–	2,459	6,945	16,562	17,007	20,706
*Moncton	New Brunswick	600	5,032	8,762	9,026	11,345	17,488	20,689
†Port Arthur	Ontario	–	1,275	2,698	3,214	11,220	14,886	19,818
†Niagara Falls	Ontario	1,610	2,347	3,349	5,702	9,248	14,764	19,046
†Lachine	Quebec	2,689	3,248	4,819	6,365	11,688	15,404	18,630
*Sudbury	Ontario	–	–	–	2,027	4,150	8,621	18,518
†Sarnia	Ontario	2,929	3,874	6,692	8,176	9,947	14,877	18,191
*Stratford	Ontario	4,313	8,239	9,500	9,959	12,946	16,094	17,742
*New Westminster	British Columbia	–	1,500	6,678	6,499	13,199	14,495	17,524
*Brandon	Manitoba	–	–	3,778	5,620	13,839	15,397	17,082
*St. Boniface	Manitoba	817	1,283	1,553	2,019	7,483	12,821	16,305
*North Bay	Ontario	–	–	–	2,530	7,737	10,692	15,528
†St. Thomas	Ontario	2,197	8,367	10,366	11,485	14,054	16,026	15,430
†Shawinigan Falls	Quebec	–	–	–	–	4,265	10,625	15,345
*Chatham	Ontario	5,873	7,873	9,052	9,068	10,770	13,256	14,569
East Windsor	Ontario	–	–	–	–	–	5,870	14,251
*Timmins	Ontario	–	–	–	–	–	3,843	14,200
*Galt	Ontario	3,827	5,187	7,535	7,866	10,299	13,216	14,006
†Belleville	Ontario	7,305	9,516	9,916	9,117	9,876	12,206	13,790

29.—Populations of Cities and Towns having over 5,000 Inhabitants in 1931, Compared with 1871-81-91-1901-11-21—continued.

City or Town.	Province.	Population.						
		1871.	1881.	1891.	1901.	1911.	1921.	1931.
*Lethbridge	Alberta	–	–	–	2,072	9,035	11,097	13,489
†St. Hyacinthe	Quebec	3,746	5,321	7,016	9,210	9,797	10,859	13,448
*Owen Sound	Ontario	3,369	4,426	7,497	8,776	12,558	12,190	12,839
*Charlottetown	Prince Edward Island	7,872	10,345	10,098	10,718	9,883	10,814	12,361
†Chicoutimi	Quebec	1,393	1,935	2,277	3,826	5,880	8,937	11,877
†Lévis	Quebec	8,052	8,734	8,797	9,242	8,703	10,470	11,724
*Valleyfield (Salaberry de)	Quebec	1,800	3,906	5,515	11,055	9,449	9,215	11,411
*Woodstock	Ontario	3,982	5,373	8,612	8,833	9,320	9,935	11,395
*St. Jean	Quebec	3,022	4,314	4,722	4,030	5,903	7,734	11,256
*Cornwall	Ontario	2,033	4,468	6,805	6,704	6,598	7,419	11,126
†Joliette	Quebec	3,047	3,268	3,372	4,220	6,346	9,039	10,765
*Sandwich	Ontario	1,160	1,143	1,352	1,450	2,302	4,415	10,715
*Welland	Ontario	1,110	1,870	2,035	1,863	5,318	8,654	10,709
Thetford Mines	Quebec	–	–	–	3,256	7,261	8,272	10,701
*Granby	Quebec	876	1,040	1,710	3,773	4,750	6,785	10,587
†Sorel	Quebec	5,636	5,791	6,669	7,057	8,420	8,174	10,320
†Medicine Hat	Alberta	–	–	–	1,570	5,608	9,634	10,300
Walkerville	Ontario	–	–	–	1,595	3,302	7,059	10,105
*Prince Albert	Saskatchewan	–	–	–	1,785	6,254	7,352	9,905
†Brockville	Ontario	5,102	7,609	8,791	8,940	9,374	10,043	9,736
Jonquière	Quebec	–	–	–	–	2,354	4,851	9,448
*Pembroke	Ontario	1,508	2,820	4,401	5,156	5,626	7,875	9,368
*Dartmouth	Nova Scotia	2,191	3,786	6,252	4,806	5,058	7,899	9,100
St. Jérôme	Quebec	1,159	2,032	2,868	3,619	3,473	5,491	8,967
*New Glasgow	Nova Scotia	1,676	2,595	3,776	4,447	6,383	8,974	8,858
*Fredericton	New Brunswick	6,006	6,218	6,502	7,117	7,208	8,114	8,830
Cap de la Madeleine	Quebec	–	–	–	–	–	6,738	8,748
*North Vancouver	British Columbia	–	–	–	365	8,196	7,652	8,510
†Rivière du Loup	Quebec	1,541	2,291	4,175	4,569	6,774	7,703	8,499
*Orillia	Ontario	1,322	2,910	4,752	4,907	6,828	7,631	8,183
*Waterloo	Ontario	1,594	2,066	2,941	3,537	4,359	5,883	8,095
*Truro	Nova Scotia	2,114	3,461	5,102	5,993	6,107	7,562	7,901
La Tuque	Quebec	–	–	–	–	2,934	5,603	7,871
*Barrie	Ontario	3,398	4,854	5,550	5,949	6,420	6,936	7,776
*Sydney Mines	Nova Scotia	1,494	2,340	2,442	3,191	7,470	8,327	7,769
*New Waterford	Nova Scotia	–	–	–	–	–	5,615	7,745
*Trail	British Columbia	–	–	–	1,360	1,460	3,020	7,573
*Lindsay	Ontario	4,049	5,080	6,081	7,003	6,964	7,620	7,505
*Amherst	Nova Scotia	1,839	2,274	3,781	4,964	8,973	9,998	7,450
New Toronto	Ontario	–	–	–	209	686	2,669	7,146
†Smiths Falls	Ontario	1,150	2,087	3,864	5,155	6,370	6,790	7,108
Lauzon	Quebec	2,827	4,578	4,391	4,267	4,982	6,428	7,084
*Yarmouth	Nova Scotia	4,696	5,324	6,089	6,430	6,600	7,073	7,055
†Midland	Ontario	–	1,095	2,088	3,174	4,663	7,016	6,920
*Mimico	Ontario	–	–	–	437	1,373	3,751	6,800
*Kenora	Ontario	–	–	1,806	5,202	6,158	5,407	6,766
*Nanaimo	British Columbia	–	1,645	4,595	6,130	6,254	6,559	6,745
Eastview	Ontario	–	–	–	776	3,169	5,324	6,686
†Drummondville	Quebec	–	900	1,955	1,450	1,725	2,852	6,609
*Portage la Prairie	Manitoba	–	–	3,363	3,901	5,892	6,766	6,597
*Campbellton	New Brunswick	–	–	1,782	2,652	3,817	5,570	6,505
†Port Colborne	Ontario	988	1,716	1,154	1,253	1,624	3,415	6,503
†Grand'Mère	Quebec	–	–	–	2,511	4,783	7,631	6,461
*Edmundston	New Brunswick	–	–	–	–	1,821	4,035	6,430
*Springhill	Nova Scotia	–	900	4,813	4,559	5,713	5,681	6,355
†Prince Rupert	British Columbia	–	–	–	–	4,184	6,393	6,350
*Magog	Quebec	–	–	2,100	3,516	3,978	5,159	6,302
*Preston	Ontario	1,408	1,419	1,843	2,308	3,883	5,423	6,280
*Trenton	Ontario	1,796	3,042	4,363	4,217	3,988	5,902	6,276
Victoriaville	Quebec	1,425	1,474	1,300	1,693	3,028	3,759	6,213
*Kamloops	British Columbia	–	–	–	–	3,772	4,501	6,167
*North Sydney	Nova Scotia	1,200	1,520	2,513	4,646	5,418	6,585	6,139
*St. Lambert	Quebec	327	332	906	1,362	3,344	3,890	6,075
*Nelson	British Columbia	–	–	–	5,273	4,476	5,230	5,992
*North Battleford	Saskatchewan	–	–	–	–	2,105	4,108	5,986
†Cobourg	Ontario	4,442	4,957	4,829	4,239	5,074	5,327	5,834
*Collingwood	Ontario	2,829	4,445	4,939	5,755	7,090	5,882	5,809
Transcona	Manitoba	–	–	–	–	–	4,185	5,747
†Rimouski	Quebec	1,186	1,417	1,429	1,804	3,097	3,612	5,589
†Brampton	Ontario	2,090	2,920	3,252	2,748	3,412	4,527	5,532
*Fort Frances	Ontario	–	–	1.339	1,163	1,611	3,109	5,470
Longueuil	Quebec	2,083	2,355	2,757	2,835	3,972	4,682	5,407

29.—Populations of Cities and Towns having over 5,000 Inhabitants in 1931, Compared with 1871-81-91-1901-11-21—concluded.

City or Town.	Province.	Population.						
		1871.	1881.	1891.	1901.	1911.	1921.	1931.
St. Laurent	Quebec	–	–	1,184	1,390	1,860	3,232	5,348
*Renfrew	Ontario	865	1,605	2,611	3,153	3,846	4,906	5,296
*Swift Current	Saskatchewan	–	–	–	121	1,852	3,518	5,296
*Ingersoll	Ontario	4,022	4,318	4,191	4,573	4,763	5,150	5,233
†Simcoe	Ontario	1,856	2,645	2,674	2,627	3,227	3,953	5,226
Forest Hill	Ontario	–	–	–	–	–	–	5,207
Hawkesbury	Ontario	1,671	1,920	2,042	4,150	4,400	5,544	5,177
†Thorold	Ontario	1,635	2,456	2,273	1,979	2,273	4,825	5,092
†Whitby	Ontario	2,732	3,140	2,786	2,110	2,248	3,957	5,046
Swansea	Ontario	–	–	–	–	–	–	5,031
*Yorkton	Saskatchewan	–	–	–	700	2,309	5,151	5,027
*Dundas	Ontario	3,135	3,709	3,546	3,173	4,299	4,978	5,026
*Stellarton	Nova Scotia	1,750	1,599	2,410	2,335	3,910	5,312	5,002
*Weyburn	Saskatchewan	–	–	–	113	2,210	3,193	5,002

30.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants in 1931, Compared with 1901, 1911 and 1921.

Town or Village.	1901.	1911.	1921.	1931.
Prince Edward Island.				
Summerside	2,875	2,678	3,228	3,759
Souris	1,140	1,089	1,094	1,063
Nova Scotia.				
Westville	3,471	4,417	4,550	3,946
Bridgewater	2,203	2,775	3,147	3,262
Pictou	3,235	3,179	2,988	3,152
Kentville	1,731	2,304	2,717	3,033
Windsor	2,849	2,894	2,946	3,032
Inverness	306	2,719	2,963	2,900
Dominion	1,546	2,589	2,390	2,846
Lunenburg	2,916	2,681	2,792	2,727
Liverpool	1,937	2,109	2,294	2,669
Trenton	1,274	1,749	2,844	2,613
Parrsboro	2,705	2,224	2,161	1,919
Wolfville	1,412	1,458	1,743	1,818
Antigonish	1,838	1,787	1,746	1,764
Canso	1,479	1,617	1,626	1,575
Shelburne	1,445	1,435	1,360	1,474
Digby	1,150	1,247	1,230	1,412
Wedgeport	1,026	1,392	1,424	1,294
Oxford	1,285	1,392	1,402	1,133
Bridgetown	858	996	1,086	1,126
Mahone Bay	866	951	1,177	1,065
Port Hawkesbury	633	684	869	1,011
Joggins	1,088	1,648	1,732	1,000
New Brunswick.				
Chatham	4,868	4,666	4,506	4,017
Dalhousie	862	1,650	1,958	3,974
St. Stephen	2,840	2,836	3,452	3,437
Newcastle	2,507	2,945	3,507	3,383
Bathurst	1,044	960	3,327	3,300
Woodstock	3,644	3,856	3,380	3,259
Sussex	1,398	1,906	2,198	2,252
Sackville	1,444	2,039	2,173	2,234
Devon	–	–	1,924	1,977
Shediac	1,075	1,442	1,973	1,883
Milltown	2,044	1,804	1,976	1,735
Grand Falls	644	1,280	1,327	1,556
Marysville	1,892	1,837	1,614	1,512
St. Andrews	1,064	987	1,065	1,207
St. George	733	988	1,110	1,087

Town or Village.	1901.	1911.	1921.	1931.
Quebec.				
St. Jérôme de Matane	1,176	2,056	3,050	4,757
Buckingham	2,936	3,854	3,835	4,638
Montmorency	–	2,710	3,367	4,575
Montreal North	–	–	1,360	4,519
Kenogami	–	–	2,557	4,500
Asbestos	783	2,224	2,189	4,396
Farnham	3,114	3,560	3,343	4,205
St. Pierre	505	2,201	3,535	4,185
Pointe Claire	555	793	2,617	4,058
Coaticook	2,880	3,165	3,554	4,044
St. Joseph d'Alma	–	–	850	3,970
Montmagny	1,919	2,617	4,145	3,927
Mégantic	2,171	2,816	3,140	3,911
Lachute	2,022	2,407	2,592	3,906
Beauharnois	1,976	2,015	2,250	3,729
Giffard	–	–	1,254	3,573
East Angus	–	–	3,802	3,566
Ste. Thérèse	1,541	2,120	3,043	3,292
Beauport	–	–	3,240	3,242
Rouyn	–	–	–	3,225
Montreal West	352	703	1,882	3,190
Mont Joli	822	2,141	2,799	3,143
Pointe aux Trembles	–	1,167	2,350	2,970
Ste. Agathe des Monts	1,073	2,020	2,812	2,949
Baie St. Paul	1,408	1,857	2,291	2,916
Nicolet	2,225	2,593	2,342	2,868
Aylmer	2,291	3,109	2,970	2,835
Charny	–	1,408	2,265	2,823
St. Joseph de Grantham	–	–	–	2,812
Iberville	1,512	1,905	2,454	2,778
Laprairie	1,451	2,388	2,158	2,774
Roberval	1,248	1,737	2,068	2,770
Windsor	2,149	2,233	2,330	2,720
Laval des Rapides	–	1,014	1,989	2,716
Donnacona	–	–	1,225	2,631
Richmond	2,057	2,175	2,450	2,596
Plessisville	1,586	1,559	2,032	2,536
Bagotville	507	1,011	2,204	2,468
Berthier	1,364	1,335	2,193	2,431
Ste. Anne de Bellevue	1,343	1,416	2,212	2,417
La Malbaie[1]	826	1,449	1,883	2,408
Mont Laurier	–	752	2,211	2,394
Louiseville	1,565	1,675	1,772	2,365

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[1] Also known as Murray Bay.

30.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants in 1931, Compared with 1901, 1911 and 1921—continued.

Town or Village.	1901.	1911.	1921.	1931.
Quebec—continued.				
La Salle	–	–	726	2,362
Saindon	–	–	1,793	2,355
Port Alfred	–	–	1,213	2,342
Priceville	–	–	–	2,310
Pointe Gatineau	1,583	1,751	1,919	2,282
Loretteville	1,555	1,588	2,066	2,251
Noranda	–	–	–	2,246
Montreal East	–	–	1,776	2,242
Waterloo	1,797	1,886	2,063	2,192
Cabano	–	–	–	2,187
Mont Royal	–	–	160	2,174
Black Lake	–	2,645	2,656	2,167
Amos	–	–	1,488	2,153
Dorval	481	1,005	1,466	2,052
Dolbeau	–	–	–	2,032
Masson	1,012	1,034	950	2,015
Almaville	–	–	1,174	2,010
St. Marc des Carrières	296	1,224	1,492	1,997
Marieville	1,306	1,587	1,748	1,986
St. Tite	991	1,438	1,783	1,969
Terrebonne	1,822	1,990	2,056	1,955
Lennoxville	1,120	1,211	1,554	1,927
Ste. Anne de Beaupré	–	2,381	1,648	1,901
Charlesbourg	–	–	1,267	1,869
St. Joseph (Richelieu)	647	1,416	1,658	1,869
East Broughton	–	996	1,709	1,868
Cowansville	699	881	1,094	1,859
Témiscamingue	–	–	–	1,855
Trois Pistoles	–	–	1,454	1,837
Quebec West	–	–	130	1,813
Arvida (city)	–	–	–	1,790
St. Alexis de la Grande Baie	–	1,355	1,735	1,790
Lac au Saumon	–	1,171	1,354	1,779
St. Raymond	1,272	1,653	1,693	1,772
Acton Vale	1,175	1,402	1,549	1,753
Chandler	–	–	1,756	1,741
Maniwaki	–	–	–	1,720
L'Epiphanie	–	–	–	1,705
Courville	–	910	1,293	1,678
Ste. Rose	1,154	1,480	1,811	1,661
Deschaillons	1,213	1,161	1,680	1,650
St. Benoit Joseph Labre	–	1,070	1,416	1,648
St. Joseph (Beauce)	1,117	1,440	1,445	1,625
Huntingdon	1,122	1,265	1,401	1,619
Greenfield Park	–	–	1,112	1,610
Arthabaska	995	1,458	1,234	1,608
St. Félicien	–	581	1,306	1,599
Ste. Marie	–	–	1,311	1,598
L'Assomption	1,605	1,747	1,320	1,576
Bedford	1,364	1,432	1,669	1,570
St. Georges Est	544	1,410	1,058	1,543
Lac St. Louis	–	–	597	1,537
St. Gabriel de Brandon	1,199	1,602	1,667	1,530
St. Jacques	–	–	1,332	1,529
St. Michel de Laval	–	–	493	1,528
Bromptonville	–	1,239	2,603	1,527
Montebello	795	954	977	1,501
Disraeli	1,018	1,606	1,646	1,437
Belœil	–	1,501	1,418	1,434
Rock Island	615	861	1,442	1,424
Causapscal	–	–	–	1,390
Danville	1,017	1,331	1,290	1,354
Pont Rouge	–	–	1,419	1,353
Pierreville	1,108	1,363	1,394	1,352
Baie de Shawinigan	–	1,024	1,213	1,316
St. Casimir	–	–	1,457	1,316
Thurso	525	601	538	1,292
Chambly Basin	849	900	1,068	1,287
Laurentides	934	1,128	1,150	1,284
La Providence	819	894	1,078	1,241
St. Jérôme	498	719	923	1,235
St. Pacôme	–	–	–	1,235
L'Abord-à-Plouffe	–	–	1,011	1,227
St. Rémi	1,080	1,021	1,135	1,201
Scotstown	791	933	987	1,189
Quebec—concluded.				
St. Eustache	1,079	996	1,098	1,187
Montreal South	–	790	1,030	1,164
Dorion	275	631	833	1,155
Cap Chat	–	–	–	1,139
Fort Coulonge	482	811	973	1,130
St. Joseph de la Rivière Bleue	–	–	864	1,111
Ste. Anne de Chicoutimi	516	657	838	1,102
Rigaud	779	856	939	1,099
Chateauguay	–	–	881	1,067
L'Enfant Jésus	–	–	–	1,066
Rawdon	–	–	1,042	1,066
Beebe Plain	477	808	921	1,053
St. Césaire	865	941	985	1,051
Ville Marie	502	850	840	1,049
Rivière du Moulin	–	–	738	1,040
Val Brillant	–	–	962	1,032
Bic	–	–	912	1,020
Notre-Dame de Portneuf	–	–	877	1,017
Ontario.				
Leamington	2,451	2,652	3,675	4,902
Port Hope	4,188	5,092	4,456	4,723
Weston	1,083	1,875	3,166	4,723
Goderich	4,158	4,522	4,107	4,491
Riverside	–	–	1,155	4,432
Wallaceburg	2,763	3,438	4,006	4,326
Sturgeon Falls	1,418	2,199	4,125	4,234
Paris	3,229	4,098	4,368	4,137
Carleton Place	4,059	3,621	3,841	4,105
Perth	3,588	3,588	3,790	4,099
Bowmanville	2,731	2,814	3,233	4,080
Penetanguishene	2,422	3,568	4,037	4,035
Arnprior	4,152	4,405	4,077	4,023
Cochrane	–	1,715	2,655	3,963
Long Branch	–	–	–	3,962
Cobalt	–	5,638	4,449	3,885
Oakville	1,643	2,372	3,298	3,857
Kapuskasing	–	–	926	3,819
St. Marys	3,384	3,388	3,847	3,802
Newmarket	2,125	2,996	3,626	3,748
Gananoque	3,526	3,804	3,604	3,592
Picton	3,698	3,564	3,356	3,580
Bridgeburg	1,356	1,770	2,401	3,521
Parry Sound	2,884	3,429	3,546	3,512
Napanee	3,143	2,807	3,038	3,497
Dunnville	2,105	2,861	3,224	3,405
Tillsonburg	2,241	2,758	2,974	3,385
Copper Cliff	2,500	3,082	2,597	3,173
Hanover	1,392	2,342	2,781	3,077
Burlington	1,119	1,831	2,709	3,046
Prescott	3,019	2,801	2,636	2,984
Strathroy	2,933	2,823	2,691	2,964
New Liskeard	–	2,108	2,268	2,880
Huntsville	2,152	2,358	2,246	2,817
Haileybury	–	3,874	3,743	2,813
Blind River	2,656	2,558	1,843	2,805
Amherstburg	2,222	2,560	2,769	2,759
Hespeler	2,457	2,368	2,777	2,752
Campbellford	2,485	3,051	2,890	2,744
Portsmouth	1,827	1,786	2,351	2,741
Listowel	2,693	2,289	2,477	2,676
Meaford	1,916	2,811	2,650	2,624
Orangeville	2,511	2,340	2,187	2,614
Petrolia	4,135	3,518	3,148	2,596
Fergus	1,396	1,534	1,796	2,594
Aurora	1,590	1,901	2,307	2,587
Merritton	1,710	1,670	2,544	2,523
Humberstone	–	–	1,524	2,490
Kincardine	2,077	1,956	2,077	2,465
Bracebridge	2,479	2,776	2,451	2,436
Walkerton	2,971	2,601	2,344	2,431
Almonte	3,023	2,452	2,426	2,415
Fort Erie	890	1,146	1,546	2,383

30.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants in 1931, Compared with 1901, 1911 and 1921—continued.

Town or Village.	1901.	1911.	1921.	1931.
Ontario—continued.				
Georgetown	1,313	1,583	2,061	2,288
Aylmer	2,204	2,102	2,194	2,283
Grimsby	1,001	1,669	2,004	2,198
Kingsville	1,537	1,427	1,783	2,174
Elmira	1,060	1,782	2,016	2,170
Tecumseh	–	–	978	2,129
Rockland	1.998	3,397	3,496	2,118
Sioux Lookout	–	550	1,127	2,088
Alexandria	1,911	2,323	2,195	2,006
Tilbury	1,012	1,368	1,673	1,992
Wingham	2,392	2,238	2,092	1,959
Essex	1,391	1,353	1,588	1,954
Ridgetown	2,405	1,954	1,855	1,952
Wiarton	2.443	2,266	1,726	1,949
Gravenhurst	2,146	1,624	1,478	1,864
Acton	1,484	1,720	1,722	1,855
Milton	1,372	1,654	1,873	1,839
Mount Forest	2,019	1,839	1,718	1,801
Clinton	2.547	2,254	2,018	1,789
Durham	1,422	1,581	1,494	1,750
Blenheim	1,653	1,387	1.565	1,737
Port Dover	1,177	1,138	1,462	1,707
Chesley	1,734	1,734	1,708	1,699
Seaforth	2,245	1,983	1,829	1,686
Capreol	–	–	1,287	1,684
Exeter	1,792	1,555	1,442	1,666
Port Credit	–	–	1,123	1,635
Thessalon	1,205	1,945	1,651	1,632
Mattawa	1,400	1,524	1,462	1,631
Mitchell	1,945	1,766	1,800	1,588
Brighton	1,378	1,320	1,411	1,580
Port Dalhousie	1,125	1,152	1,492	1,547
Palmerston	1,850	1,665	1,523	1,543
Dresden	1,613	1,551	1,339	1,529
Southampton	1,636	1,685	1,537	1,489
Forest	1,553	1,445	1,422	1,480
Deseronto	3,527	2,013	1,847	1,476
Iroquois Falls	–	–	1,178	1,476
New Hamburg	1,208	1,484	1,351	1,436
Keewatin	1,156	1,242	1,327	1,422
Morrisburg	1,693	1,696	1,444	1,420
Rainy River	–	1,578	1,444	1,402
Caledonia	801	952	1,223	1,396
Hagersville	1,020	1,106	1,169	1,385
Vankleek Hill	1,674	1,577	1,499	1,380
Point Edward	780	874	1,258	1,362
Alliston	1,256	1,279	1,376	1,355
Lakefield	1,244	1,397	1,189	1,332
Dryden	140	715	1,019	1,326
Uxbridge	1,657	1,433	1,456	1,325
Cardinal	1,378	1,111	1,241	1,319
Port Elgin	1,313	1,235	1,291	1,305
Harriston	1,637	1,491	1,263	1,296
Richmond Hill	629	652	1,055	1,295
Kemptville	1,523	1,192	1,204	1,286
Tweed	1,168	1,368	1,339	1,271
Chippawa	460	707	1,137	1,266
Niagara	1,258	1,318	1,357	1,228
Waterford	1,122	1,083	1,123	1,213
Englehart	–	670	759	1,210
Beamsville	832	1,096	1,256	1,203
Elora	1,187	1,197	1,136	1,195
Havelock	984	1,436	1,268	1,173
Port Perry	1,465	1,148	1,143	1,163
Norwich	1,269	1,112	1,176	1,158
Stouffville	1,223	1,034	1,053	1,155
Cache Bay	384	889	926	1,151
Victoria Harbour	989	1,616	1,463	1,128
Delhi	823	825	733	1,121
L'Orignal	1,026	1,347	1,298	1,121
Little Current	728	1,208	923	1,101
Shelburne	1,188	1,113	1,072	1,077
Madoc	1,157	1,058	1,058	1,059
Ontario—concluded.				
Parkhill	1,430	1,289	1,152	1,030
Tavistock	403	981	1,011	1,029
Winchester	1,101	1,143	1,126	1,027
Arthur	1,285	1,102	1,104	1,021
Eganville	1,107	1,189	1,015	1,020
Stayner	1,225	1,039	972	1,019
Colborne	1,017	999	932	1,015
Chesterville	932	883	967	1,012
Markham	967	909	1,012	1,008
Manitoba.				
Selkirk	2,188	2,977	3,726	4,486
The Pas	–	–	1,858	4,030
Dauphin	1,135	2,815	3,885	3,971
Brooklands	–	–	–	2,462
Neepawa	1,418	1,864	1,887	1,910
Minnedosa	1,052	1,483	1,505	1,680
Souris	839	1,854	1,710	1,661
Virden	901	1.550	1,361	1,590
Carman	1,439	1,271	1,591	1,418
Morden	1,522	1,130	1,268	1,416
Tuxedo	–	–	1,062	1,173
Beauséjour	–	847	994	1,139
Stonewall	589	1,005	1,112	1,031
Winkler	391	458	812	1,005
Killarney	585	1,010	871	1,003
Saskatchewan.				
Melville	–	1,816	2,808	3,891
Estevan	141	1,981	2,290	2,936
Biggar	–	315	1,535	2,369
Kamsack	–	473	2,002	2,087
Humboldt	–	859	1,822	1,899
Melfort	–	599	1,746	1,809
Shaunavon	–	–	1,146	1,761
Rosetown	–	317	865	1,553
Lloydminster[1]	–	663	755	1,516
Assiniboia	–	–	1,006	1,454
Indian Head	768	1,285	1,439	1,438
Rosthern	413	1,172	1,074	1,412
Watrous	–	781	1,101	1,303
Wilkie	–	537	778	1,222
Canora	–	435	1,230	1,179
Maple Creek	382	936	1,002	1,154
Sutherland	–	421	961	1,148
Gravelbourg	–	–	1,106	1,137
Moosomin	868	1,143	1,099	1,119
Battleford	609	1,335	1,229	1,096
Tisdale	–	250	783	1,069
Wynyard	–	515	849	1,042
Kindersley	–	456	1,003	1,037
Herbert	–	559	827	1,009
Radville	–	233	883	1,005
Alberta.				
Drumheller (city)	–	–	2,499	2,987
Red Deer (city)	323	2,118	2,328	2,344
Camrose	–	1,586	1,892	2,258
Wetaskiwin (city)	550	2,411	2,061	2,125
Raymond	–	1,465	1,394	1,849
Coleman	–	1,557	1,590	1,704
Cardston	639	1,207	1,612	1,672
Vegreville	–	1,029	1,479	1,659
Blairmore	231	1,137	1,552	1,629
Edson	–	497	1,138	1,547
Hanna	–	–	1,364	1,490
Grande Prairie	–	–	1,061	1,464
High River	153	1,182	1,198	1,459
MacLeod	796	1,844	1,723	1,447
Taber	–	1,400	1,705	1,279

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[1] Under the Saskatchewan Town Act Lloydminster, Alberta, is merged with Lloydminster, Saskatchewan, for municipal purposes.

30.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants in 1931, Compared with 1901, 1911 and 1921—concluded.

Town or Village.	1901.	1911.	1921.	1931.	Town or Village.	1901.	1911.	1921.	1931.
Alberta—concluded.					**British Columbia**—concluded.				
Vermilion	–	625	1,272	1,270					
Lacombe	499	1,029	1,133	1,259	Cranbrook (city)	1,196	3,090	2,725	3,067
Magrath	424	995	1,069	1,224	Rossland (city)	6,156	2,826	2,097	2,848
Stettler	–	1,444	1,416	1,219	Revelstoke (city)	1,600	3,017	2,782	2,736
Redcliff	–	220	1,137	1,192	Fernie (city)	–	3,146	2,802	2,732
Claresholm	–	809	963	1,156	Prince George (city)	–	–	2,053	2,479
Wainwright	–	788	975	1,147	Chilliwack (city)	277	1,657	1,767	2,461
Beverly	–	–	1,039	1,111	Cumberland (city)	732	1,237	2,161	2,371
Olds	218	917	764	1,056	Port Alberni (city)	–	–	1,056	2,356
Innisfail	317	602	941	1,024	Duncan (city)	–	–	1,178	1,843
Pincher Creek	335	1,027	888	1,024	Ladysmith (city)	746	2,517	1,151	1,443
Fort Saskatchewan	306	782	982	1,001	Mission (village)	–	–	–	1,314
					Port Coquitlam (city)	–	–	1,178	1,312
British Columbia.					Grand Forks (city)	1,012	1,577	1,469	1,298
					Merritt (city)	–	703	1,389	1,296
Kelowna (city)	261	1,663	2,520	4,655	Port Moody (city)	–	–	1,030	1,260
Vernon (city)	802	2,671	3,685	3,937	Courtenay (city)	–	–	810	1,219

Rural and Urban Farm Populations.—Of the 10,362,833 people who form the population of the nine provinces of Canada, exclusive of the Territories, only 3,289,507 or 31·7 p.c. live on farms.

There are 728,623 farms within the nine provinces and, considering the 14,056 farms (see Table **31**) which are located within the limits of incorporated cities, towns or villages as "urban", the farm population is classified as 3,224,241 living on rural farms and 65,266 on urban farms. More than one half (50·5 p.c.) of the people on urban farms are in Quebec and only 23·6 p.c. in Ontario. Alberta ranks third with 6·4 p.c. and Nova Scotia fourth with 5·7 p.c. This is in contrast with the distribution on rural farms where 24·4 p.c. are in Ontario, 23·1 in Quebec, 17·4 in Saskatchewan and 11·5 in Alberta; these four provinces therefore have 76·4 p.c. of the rural farm population. The rural and urban farm populations bear a very close relationship to the number of farms of each class in the individual provinces but the distribution of rural farms follows more closely than that of urban farms the distribution of total population (see Table **1**). Among the provinces, Quebec has the greatest number of persons per farm on farms of both the rural and urban classes.

Table **31** gives the number of farms and the farm populations, urban and rural, by provinces as recorded at the 1931 census.

31.—Urban and Rural Farm Populations, by Provinces, 1931.

Province.	Farms June 1, 1931.			Population June 1, 1931, living on—					
	Total.	Rural.	Urban.	All Farms.	Rural Farms.	Urban Farms.	Persons per Farm.		
							All	Rural	Urban
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	12,865	12,696	169	55,478	54,963	515	4·31	4·32	3·04
Nova Scotia	39,444	38,629	815	177,690	173,965	3,725	4·50	4·50	4·57
New Brunswick	34,025	33,646	379	180,214	178,494	1,720	5·29	5·30	4·53
Quebec	135,957	129,863	6,094	777,384	744,417	32,967	5·72	5·74	5·41
Ontario	192,174	188,134	4,040	800,960	785,550	15,410	4·16	4·17	3·81
Manitoba	54,199	53,777	422	256,305	254,302	2,003	4·72	4·72	4·74
Saskatchewan	136,472	135,826	646	564,012	561,407	2,605	4·13	4·13	4·03
Alberta	97,408	96,439	969	375,097	370,899	4,198	3·95	3·84	4·33
British Columbia	26,079	25,557	522	102,367	100,244	2,123	3·50	3·92	4·06
Canada	**728,623**	**714,567**	**14,056**	**3,289,507**	**3,224,241**	**65,266**	**4·51**	**4·51**	**4·64**

Of the 728,623 farms in Canada, 281,044 or 38·5 p.c. employed hired labour for 7,368,671 weeks at a cost for wages and board of $100,425,980. On the average, therefore, each farm engaging help employed a hired man for 26·2 weeks at a cost of $13.62 per week.

Section 10.—Literacy.

Literacy in Canada has shown most encouraging progress since the opening of the twentieth century.

In 1901, 14·38 p.c. of the population of five years of age and over could neither read nor write; the corresponding percentage for 1911 was 10·50; for 1921, 9·25; and for 1931 it was only 7·18. (See Table **32.**)

32.—Ability to Read and Write of the Population 5 Years of Age and Over, by Provinces, 1901, 1911, 1921 and 1931.

Province.		Total Population.	5 Years of Age and Over.	Numbers 5 Years and Over.			Percentages 5 Years and Over.		
				Can Read and Write.	Can Read only.	Can neither Read nor Write.	Can Read and Write.	Can Read only.	Can neither Read nor Write.
		No.	No.	No.	No.	No.	p.c.	p.c.	p.c.
CANADA—	1901	5,371,315	4,728,631	3,918,915	129,584	680,132	82·88	2·74	14·38
	1911	7,206,643	6,319,160	5,622,844	32,863	663,453	88·98	0·52	10·50
	1921	8,787,949	7,730,400	6,957,168	58,242	714,990	90·00	0·75	9·25
	1931	10,376,786	9,302,371	8,582,985	51,709	667,677	92·27	0·56	7·18
Prince Edward Island—	1901	103,259	91,860	77,372	4,591	9,897	84·23	5·00	10·77
	1911	93,728	83,792	76,259	1,153	6,380	91·01	1·38	7·61
	1921	88,615	78,969	72,147	1,335	5,487	91·36	1·69	6·95
	1931	88,038	78,893	73,260	800	4,833	92·86	1·01	6·13
Nova Scotia—	1901	459,574	407,152	331,007	18,143	58,002	81·30	4·46	14·24
	1911	492,338	433,801	384,605	4,358	44,838	88·66	1·00	10·34
	1921	523,837	463,442	413,952	6,026	43,464	89·32	1·30	9·38
	1931	512,846	459,587	419,760	4,342	35,485	91·33	0·94	7·72
New Brunswick—	1901	331,120	290,732	233,060	10,618	47,054	80·16	3·65	16·19
	1911	351,889	306,896	261,160	2,622	43,114	85·10	0·85	14·05
	1921	387,876	338,996	293,454	3,286	42,256	86·57	0·97	12·46
	1931	408,219	360,633	316,224	3,507	40,902	87·69	0·97	11·34
Quebec—	1901	1,648,898	1,411,324	1,099,693	61,614	250,017	77·92	4·37	17·71
	1911	2,005,776	1,714,545	1,483,301	12,977	218,267	86·51	0·76	12·73
	1921	2,360,665	2,043,748	1,814,709	17,943	211,096	88·79	0·88	10·33
	1931	2,874,255	2,521,360	2,275,342	21,656	224,362	90·24	0·86	8·90
Ontario—	1901	2,182,947	1,958,635	1,758,427	28,830	171,378	89·78	1·47	8·75
	1911	2,527,292	2,264,419	2,108,485	7,302	148,632	93·11	0·32	6·57
	1921	2,933,662	2,632,085	2,447,588	15,207	169,290	92·99	0·58	6·43
	1931	3,431,683	3,124,014	2,959,132	9,254	155,628	94·72	0·30	4·98
Manitoba—	1901	255,211	219,290	184,295	3,083	31,912	84·04	1·41	14·55
	1911	461,394	398,078	340,870	1,231	55,977	85·63	0·31	14·06
	1921	610,118	532,306	464,369	4,011	63,926	87·24	0·75	12·01
	1931	700,139	633,540	582,689	2,647	48,204	91·97	0·42	7·61
Saskatchewan—	1901	91,279	78,185	49,941	797	27,447	63·88	1·02	35·10
	1911	492,432	421,432	362,768	926	57,738	86·08	0·22	13·70
	1921	757,510	644,335	566,038	4,609	73,688	87·85	0·71	11·44
	1931	921,785	816,559	747,024	4,079	65,456	91·48	0·50	8·02

32.—Ability to Read and Write of the Population 5 years of Age and Over, by Provinces, 1901, 1911, 1921 and 1931—concluded.

Province.	Total Population.	5 Years of Age and Over.	Numbers 5 Years and Over.			Percentages 5 Years and Over.		
			Can Read and Write.	Can Read only.	Can neither Read nor Write.	Can Read and Write.	Can Read only.	Can neither Read nor Write.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.
Alberta— 1901	73,022	62,554	42,731	707	19,116	68·31	1·13	30·56
1911	374,295	325,916	283,513	1,198	41,205	86·99	0·37	12·64
1921	588,454	509,896	453,572	3,259	53,065	88·95	0·64	10·41
1931	731,605	653,233	603,401	3,228	46,604	92·37	0·49	7·13
British Columbia— 1901	178,657	163,336	121,782	973	40,581	74·56	0·60	24·84
1911	392,480	356,603	314,183	1,013	41,407	88·11	0·28	11·61
1921	524,582	474,787	427,374	2,552	44,861	90·01	0·54	9·45
1931	694,263	642,284	600,413	2,046	39,825	93·48	0·32	6·20
Yukon— 1901	27,219	26,864	17,374	54	9,436	64·67	0·20	35·13
1911	8,512	8,006	6,843	76	1,087	85·47	0·95	13·58
1921	4,157	3,880	2,732	8	1,140	70·41	0·21	29·38
1931	4,230	3,869	2,811	32	1,026	72·65	0·83	26·52
Northwest Territories—1901	20,129	18,699	3,233	174	15,292	17·29	0·93	81·78
1911	6,507	5,672	857	7	4,808	15·11	0·12	84·77
1921	7,988	7,471	749	6	6,716	10·03	0·08	89·89
1931	9,723	8,399	2,929	118	5,352	34·87	1·40	63·72

Literacy of Population over Ten Years of Age, by Age-Groups and Sex.—Experience has shown that statistics of literacy among children under ten years of age are practically meaningless. A truer test of progress has been made by taking the statistics for the population of ten years of age and over, but unfortunately this comparison cannot be made for earlier censuses than that of 1921. Table **33** shows literacy, by sex and province, of persons ten years of age and over in 1931, and the percentage of illiterates in this significant section of the population was 3·79 p.c. in 1931, as compared with 5·10 p.c. in 1921. It will be noticed that illiteracy is very definitely greater among males than among females. In 1931, 4·32 p.c. of the male population and 3·21 p.c. of the female population were recorded as unable to read or write, as compared with 5·73 p.c. and 4·43 p.c. respectively for 1921. Manitoba, Saskatchewan and Alberta, alone among the provinces, show a higher percentage of female illiteracy; this condition existed also in 1921, although the corresponding percentages for both males and females were then substantially greater, being: Manitoba, males 6·48, females 7·78; Saskatchewan, males 5·00, females 7·08; Alberta, males 4·62, females 5·92.

The figures show that New Brunswick is in the most unfavourable position, though there has been an improvement since 1921. No less than 6·91 p.c. of the population of that province — 8·75 p.c. of the males and 4·97 p.c. of the females — could neither read nor write in 1931. For 1921 the figures were: total illiterate, 7·61 p.c; males 9·24; females 5·90. On the other hand the province of Quebec, which in 1921 recorded the high percentage of 6·20 (7·85 males and 4·54 females) as illiterate, had reduced this proportion to 4·76 (6·21 males and 3·29 females) by 1931.

33.—Literacy of the Population of 10 Years and Over, by Sexes and Provinces, 1931.

Province.	Population 10 Years and Over.	Can Read and Write.	Can Read only.	Can neither Read nor Write.	Percentages.		
					Can Read and Write.	Can Read only.	Can neither Read nor Write.
CANADA—	No.	No.	No.	No.	p.c.	p.c.	p.c.
Total	8,169,622	7,821,819	38,407	309,396	95·74	0·47	3·79
Male	4,258,862	4,053,007	22,028	183,827	95·17	0·52	4·32
Female	3,910,760	3,768,812	16,379	125,569	96·37	0·42	3·21
Prince Edward Island—							
Total	69,333	66,996	502	1,835	96·63	0·72	2·65
Male	35,907	34,584	213	1,110	96·32	0·59	3·09
Female	33,426	32,412	289	725	96·97	0·86	2·17
Nova Scotia—							
Total	402,401	382,472	2,790	17,139	95·05	0·69	4·26
Male	207,098	195,465	1,438	10,195	94·38	0·69	4·92
Female	195,303	187,007	1,352	6,944	95·75	0·69	3·56
New Brunswick—							
Total	310,316	286,676	2,200	21,440	92·38	0·71	6·91
Male	159,102	143,996	1,181	13,925	90·51	0·74	8·75
Female	151,214	142,680	1,019	7,515	94·36	0·67	4·97
Quebec—							
Total	2,167,517	2,048,778	15,527	103,212	94·52	0·72	4·76
Male	1,091,418	1,014,259	9,399	67,760	92·93	0·86	6·21
Female	1,076,099	1,034,519	6,128	35,452	96·14	0·57	3·29
Ontario—							
Total	2,791,072	2,719,558	7,357	64,157	97·44	0·26	2·30
Male	1,423,989	1,381,104	4,341	38,544	96·99	0·30	2·71
Female	1,367,083	1,338,454	3,016	25,613	97·91	0·22	1·87
Manitoba—							
Total	557,806	530,779	2,151	24,876	95·15	0·39	4·46
Male	296,095	283,063	1,040	11,992	95·60	0·35	4·05
Female	261,711	247,716	1,111	12,884	94·65	0·42	4·92
Saskatchewan—							
Total	705,350	672,812	3,441	29,097	95·39	0·49	4·13
Male	390,105	374,025	1,791	14,289	95·88	0·46	3·66
Female	315,245	298,787	1,650	14,808	94·78	0·52	4·70
Alberta—							
Total	572,129	549,789	2,671	19,669	96·10	0·47	3·44
Male	319,840	308,619	1,458	9,763	96·49	0·46	3·05
Female	252,289	241,170	1,213	9,906	95·59	0·48	3·93
British Columbia—							
Total	583,135	558,417	1,630	23,088	95·76	0·28	3·96
Male	328,983	314,134	1,096	13,753	95·49	0·33	4·18
Female	254,152	244,283	534	9,335	96·12	0·21	3·67
Yukon—							
Total	3,542	2,710	30	802	76·51	0·85	22·64
Male	2,475	2,063	19	393	83·35	0·77	15·88
Female	1,067	647	11	409	60·64	1·03	38·33
Northwest Territories—							
Total	7,021	2,832	108	4,081	40·34	1·54	58·13
Male	3,850	1,695	52	2,103	44·03	1·35	54·62
Female	3,171	1,137	56	1,978	35·86	1·77	62·38

Literacy among Urban Populations.—Table **34** shows the literacy of persons residing in cities with populations of 30,000 and over in 1931. The final three columns give percentage figures for persons ten years of age and over, and a comparison with figures for 1921 shows that very definite changes have taken place in the literacy of urban populations. Toronto had, in 1921 as in 1931, a very low percentage of illiteracy — 1·68 p.c. in 1921 and 1·26 p.c. in 1931 — and the larger cities of Ontario, generally, made a comparatively good showing in 1921. Other large cities of Canada had in 1921 fairly high percentages of illiteracy, the figures being: Montreal, 3·60 p.c.; Winnipeg, 3·54 p.c.; Vancouver, 3·54 p.c.; Quebec, 3·27 p.c.; Ottawa 2·69 p.c.; and Hamilton, 2·12 p.c. Comparison of 1921 figures[1] with those for 1931 in Table **34** brings out the great improvement in the western cities. Marked betterment is evident throughout the list, but the exceptional progress in the west has put Three Rivers, Quebec, Montreal and Halifax in a relatively less favourable position as regards illiteracy. While Three Rivers has still the highest percentage of persons who can neither read nor write, the proportion has been reduced from 7·03 p.c. in 1921 to 3·45 p.c. in 1931.

The city of Saskatoon, Saskatchewan, had the lowest percentage of illiteracy in 1931, *viz.*, 0·71, London, Ontario, being next with 0·88 p.c. In the cities of Windsor, Ontario, and Regina, Saskatchewan, both of which had low percentages of illiterates in 1921 (1·53 p.c. and 1·44 p.c. respectively), slight increases to 1·78 p.c. and 1·68 p.c., respectively, are shown in 1931.

34.—Literacy of the Populations of 10 Years of Age and Over in Cities and Towns of 30,000 and Over, by Numbers and Percentages, 1931.

City or Town.	Total Population.	10 Years and Over.	Numbers 10 Years and Over.			Percentages 10 Years and Over.		
			Can Read and Write.	Can Read only.	Can neither Read nor Write.	Can Read and Write.	Can Read only.	Can neither Read nor Write.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.
Montreal	818,577	654,094	635,811	2,508	15,775	97·20	0·38	2·41
Toronto	631,207	535,327	527,465	1,099	6,763	98·53	0·21	1·26
Vancouver	246,593	212,413	208,754	296	3,363	98·28	0·14	1·58
Winnipeg	218,785	185,534	181,305	541	3,688	97·72	0·29	1·99
Hamilton	155,547	127,891	125,668	177	2,046	98·26	0·14	1·60
Quebec	130,594	100,203	97.161	502	2,540	96·96	0·50	2·53
Ottawa	126,872	104,588	102,257	246	2,085	97·77	0·24	1·99
Calgary	83,761	70,512	69,626	148	738	98·74	0·21	1·05
Edmonton	79,197	65,101	63,980	213	908	98·28	0·33	1·39
London	71,148	60,203	59,646	30	527	99·07	0·05	0·88
Windsor	63,108	50,623	49,606	118	899	97·99	0·23	1·78
Verdun	60,745	46,818	46,232	98	488	98·75	0·21	1·04
Halifax	59,275	47,725	46,468	137	1,120	97·37	0·29	2·35
Regina	53,209	43,161	42,319	116	726	98·05	0·27	1·68
Saint John	47,514	38,729	38,149	69	511	98·50	0·18	1·32
Saskatoon	43,291	35,514	35,212	49	253	99·15	0·14	0·71
Victoria	39,082	34,511	34,111	30	370	98·84	0·09	1·07
Three Rivers	35,450	26,079	25,053	125	901	96·07	0·48	3·45
Kitchener	30,793	24,954	24,618	39	297	98·65	0·16	1·19
Brantford	30,107	25,069	24,562	50	457	97·98	0·20	1·82

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[1] See p. 133 of the 1924 Year Book.

Section 11.—School Attendance.

The census statistics of school attendance for the population between the ages of 5 and 19 years are presented for 1911, 1921 and 1931 in Tables **35** and **36** for Canada as a whole. In comparing the statistics of school attendance for the census of 1931 with those of 1921 and 1911, it is necessary to take into account the fact that in 1931 and 1921, the question as to school attendance covered the nine months ended May 31, while in 1911 the question covered the calendar year 1910. For this reason the figures are not quite comparable, although the general trends as shown by the percentages of Table **36** are probably not materially affected.

In 1931 the population of school age, 5-19 years, numbered 3,246,391 or 31·3 p.c. of the total population, as compared with 31·4 p.c. in 1921 and 30·0 p.c. in 1911. The proportion of the total group 5-19 years actually in attendance at school shows progress. In 1911 only 52·88 p.c. of the population of this age were in attendance at school; the proportion rose to 61·33 p.c. in 1921 and 65·59 p.c. in 1931. The proportion of males between these ages attending school increased from 52·15 p.c. in 1911 to 60·80 p.c. in 1921 and 65·12 p.c. in 1931; that of females from 53·63 p.c. in 1911 to 61·86 p.c. in 1921 and 66·08 p.c. in 1931.

The tables show the school attendance and percentage of school attendance respectively of the population 5-19 years of age for the census years 1911, 1921 and 1931.

35.—School Attendance of the Total Population[1] 5-19 Years of Age Inclusive, by Sexes, for all Canada, 1911, 1921 and 1931.

Schedule.	Both Sexes.			Males.			Females.		
	1911.	1921.	1931.	1911.	1921.	1931.	1911.	1921.	1931.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
5-9 years—Totals	**783,252**	**1,048,694**	**1,132,749**	**395,045**	**528,663**	**572,507**	**388,207**	**520,031**	**560,242**
At school......	459,682	686,614	777,235	232,581	345,494	391,322	227,101	341,120	385,913
Not at school..	323,570	362,080	355,514	162,464	183,169	181,185	161,106	178,911	174,329
10-19 years—Totals.....	**1,380,685**	**1,714,867**	**2,113,612**	**706,155**	**864,517**	**1,068,180**	**674,530**	**850,350**	**1,045,462**
At school......	684,599	1,008,177	1,352,217	341,745	501,520	677,059	342,854	506,657	675,158
Not at school..	696,086	706,690	761,425	364,410	362,997	391,121	331,676	343,693	370,304
5-19 years—Totals.....	**2,163,937**	**2,763,561**	**3,246,391**	**1,101,200**	**1,393,180**	**1,640,687**	**1,062,737**	**1,370,381**	**1,605,704**
At school......	1,144.281	1,694,791	2,129,452	574,326	847,014	1,068,381	569,955	847,777	1,061,071
1 month.....	–	–	1,024	–	–	492	–	–	532
1-3 months[2]..	42,514	72,543	45,652	21,904	36,595	22,678	20,610	35,948	22,974
4-6 " ...	131,343	133,417	67,987	68,468	68,077	34,521	62,875	65,340	33,466
7-9 " ...	970,424	1,488,831	2,014,789	483,954	742,342	1,010,690	486,470	746,489	1,004,099
Not at school..	1,019,656	1,068,770	1,116,939	526,874	546,166	572,306	492,782	522,604	544,633

[1] Including population 5-19 years of age of Yukon and Northwest Territories. [2] 2-3 months in 1931.

36.—Percentages of School Attendance of Total Population[1] 5-19 Years of Age Inclusive, by Sexes, for all Canada, 1911, 1921 and 1931.

Schedule.	Both Sexes.				Males.				Females.			
	1911.	1921.	1931.	Increase 1921-1931.	1911.	1921.	1931.	Increase 1921-1931.	1911.	1921.	1931.	Increase 1921-1931.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
5-9 years—												
At school	58·69	65·47	68·61	+3·14	58·87	65·35	68·35	+3·00	58·50	65·60	68·88	+3·28
Not at school	41·31	34·53	31·39	−3·14	41·13	34·65	31·65	−3·00	41·50	34·40	31·12	−3·28
10-19 years—												
At school	49·58	58·79	63·98	+5·19	48·40	58·01	63·38	+5·37	50·83	59·58	64·58	+5·00
Not at school	50·42	41·21	36·02	−5·19	51·60	41·99	36·62	−5·37	49·17	40·42	35·42	−5·00
5-19 years—												
At school	52·88	61·33	65·59	+4·26	52·15	60·80	65·12	+4·32	53·63	61·86	66·08	+4·22
1 month	–	–	0·03	+0·03	–	–	0·03	+0·03	–	–	0·03	+0·03
1-3 months[2]	1·97	2·62	1·41	−1·21	1·99	2·63	1·38	−1·25	1·94	2·62	1·43	−1·19
4-6 "	6·07	4·83	2·09	−2·74	6·22	4·89	2·10	−2·79	5·92	4·77	2·08	−2·69
7-9 "	44·84	53·87	62·06	+8·19	43·94	53·28	61·60	+8·32	45·77	54·47	62·53	+8·06
Not at school	47·12	38·67	34·41	−4·26	47·85	39·20	34·88	−4·32	46·37	38·14	33·92	−4·22

[1] Including population 5-19 years of age of Yukon and the Northwest Territories. [3] 2-3 months in 1931.

Section 12.—Annual Estimates of Population.

While the populations in different countries are actually counted at decennial or quinquennial censuses, annual estimates of populations are required by modern States for many purposes, such as the calculation of birth, death and marriage rates, and of per capita figures of production, trade, finance, consumption, etc. In different countries various methods of obtaining annual figures of post-censal populations are adopted. For example, it is possible, with good vital statistics and records of arrivals and departures, to obtain the actual population at any particular date with approximate accuracy by the simple method of adding births and arrivals and subtracting deaths and departures during the period elapsed since the census. This method is impracticable for Canada, on account of her 4,000 miles of common boundary line with the United States, crossed every day by many thousands of people in both directions. In almost all civilized countries, the actual methods of making the estimates vary. Thus, the method of arithmetical progression is widely used in estimating the populations in the older countries of the world; this method involves the annual addition to the population of the country and of particular areas within it of one-fifth or one-tenth of the numerical increase in the last quinquennial or decennial inter-censal period. In the case of Canada annual figures of population have been purely estimates, made on the basis of past increases, prior to the 1931 census. They have now been worked out on a basis which takes into consideration collateral data back to 1867, and the resulting figures are believed to more accurately state the populations at inter-censal periods than any before published.

The new method upon which calculations are based was described at p. 108-9 of the 1932 Year Book.[1]

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[1] The table of estimates on p. 145 and the description of the method upon which calculations are based were the work of M. C. MacLean, M.A., F.S.S., Chief of Census Analysis, Dominion Bureau of Statistics.

37.—Estimates of the Population of Canada for Inter-Censal Years, by Provinces, 1867-1932.

(000's omitted.)

Year.	Canada.	P.E. Island.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W. Territories.
	No.	No	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1867	3,463	88	364	271	1,123	1,525	15	-	-	32	-	45
1868	3,511	90	369	274	1,137	1,545	17	-	-	33	-	46
1869	3,565	91	374	277	1,154	1,569	20	-	-	34	-	46
1870	3,625	92	381	282	1,171	1,594	22	-	-	36	-	47
1871	3,689	94	388	286	1,191	1,621	25	-	-	36	-	48
1872	3,754	96	394	290	1,208	1,651	29	-	-	37	-	49
1873	3,826	98	400	294	1,227	1,685	33	-	-	39	-	50
1874	3,895	99	406	298	1,246	1,718	37	-	-	40	-	51
1875	3,954	101	411	301	1,260	1,746	41	-	-	42	-	52
1876	4,009	102	415	304	1,275	1,774	44	-	-	43	-	52
1877	4,064	103	420	307	1,289	1,802	47	-	-	44	-	52
1878	4,120	104	425	310	1,304	1,829	50	-	-	45	-	53
1879	4,185	105	430	313	1,322	1,861	54	-	-	46	-	54
1880	4,255	107	435	317	1,341	1,894	58	-	-	48	-	55
1881	4,325	109	441	321	1,360	1,927	62	-	-	49	-	56
1882	4,375	109	442	321	1,372	1,946	71	-	-	54	-	60
1883	4,430	109	443	321	1,386	1,968	80	-	-	59	-	64
1884	4,487	109	445	321	1,401	1,988	90	-	-	64	-	69
1885	4,537	109	446	321	1,414	2,005	99	-	-	60	-	74
1886	4,580	109	446	321	1,424	2,020	108	-	-	74	-	78
1887	4,626	109	446	321	1,436	2,037	117	-	-	78	-	82
1888	4,678	109	447	321	1,449	2,057	126	-	-	83	-	86
1889	4,729	109	448	321	1,462	2,075	135	-	-	88	-	91
1890	4,779	109	449	321	1,475	2,093	144	-	-	93	-	95
1891	4,833	109	450	321	1,489	2,114	153	-	-	98	-	99
1892	4,883	108	451	322	1,504	2,119	163	-	-	106	-	110
1893	4,931	108	452	323	1,518	2,122	173	-	-	114	-	121
1894	4,979	107	452	323	1,532	2,128	183	-	-	122	-	132
1895	5,026	106	452	323	1,546	2,133	193	-	-	130	-	143
1896	5,074	105	453	324	1,560	2,137	203	-	-	138	-	154
1897	5,122	104	454	325	1,575	2,142	213	-	-	146	-	163
1898	5,175	104	455	326	1,591	2,149	223	-	-	154	-	173
1899	5,235	103	457	327	1,610	2,159	234	-	-	162	-	183
1900	5,301	103	459	329	1,630	2,172	245	-	-	170	-	193
1901	5,371	103	460	331	1,649	2,183	255	91	73	179	27	20
1902	5,494	101	459	331	1,670	2,194	275	125	96	199	25	19
1903	5,651	100	460	331	1,709	2,217	296	159	119	220	23	17
1904	5,827	99	463	333	1,752	2,246	318	194	142	242	22	16
1905	6,002	99	464	333	1,771	2,289	344	236	166	264	21	15
1906	6,197	96	465	334	1,784	2,299	366	258	185	279	18	13
1907	6,411	96	475	341	1,853	2,365	395	311	236	309	18	12
1908	6,625	95	480	345	1,902	2,412	413	356	266	330	15	11
1909	6,800	94	483	346	1,931	2,444	427	401	301	350	13	10
1910	6,988	94	486	348	1,965	2,482	441	446	336	370	11	9
1911	7,207	94	492	352	2,006	2,527	461	492	374	393	9	7
1912	7,389	94	496	356	2,042	2,572	481	525	400	407	9	7
1913	7,632	94	504	363	2,096	2,639	505	563	429	424	8	7
1914	7,879	95	512	371	2,148	2,705	530	601	459	442	8	8
1915	7,981	94	511	371	2,162	2,724	545	628	480	450	8	8
1916	8,001	92	505	368	2,154	2,713	554	648	496	456	7	8
1917	8,060	90	503	368	2,169	2,724	558	662	508	464	6	8
1918	8,148	89	502	369	2,191	2,744	565	678	522	474	6	8
1919	8,311	89	507	373	2,234	2,789	577	700	541	488	5	8
1920	8,556	89	516	381	2,299	2,863	594	729	565	507	5	8
1921	8,788	89	524	388	2,361	2,934	610	757	588	525	4	8
1922	8,919	89	522	389	2,409	2,980	616	769	592	541	4	8
1923	9,010	87	518	389	2,446	3,013	619	778	593	555	4	8
1924	9,143	86	516	391	2,495	3,059	625	791	597	571	4	8
1925	9,294	86	515	393	2,549	3,111	632	806	602	588	4	8
1926	9,451	87	515	396	2,603	3,164	639	821	608	606	4	8
1927	9,636	87	515	398	2,657	3,219	651	841	633	623	4	8
1928	9,835	88	515	401	2,715	3,278	664	862	658	641	4	9
1929	10,029	88	515	404	2,772	3,334	677	883	684	659	4	9
1930	10,208	88	514	406	2,825	3,386	689	903	708	676	4	9
1931	10,376	88	513	408	2,874	3,432	700	922	732	694	4	9
1932	10,506	88	513	409	2,904	3,459	705	971	740	704	4	9

CHAPTER V.—VITAL STATISTICS.[1]

The collection of vital statistics commenced in Canada, as in England, with the registration of baptisms, marriages and burials by the ecclesiastical authorities. These registers, maintained by the priests from the first settlement of the country, have made it possible for the vital statistics of the French colony to be compiled from the year 1610.[2] In the beginning only one copy of such records was made, but in 1678 the Sovereign Council of Quebec ordered that in future such records should be made in duplicate, and that one copy, duly authenticated, should be delivered to the civil authorities. This arrangement was continued after the cession of the country to the British, and was extended to the newly-formed Protestant congregations of Lower Canada by an Act of 1795, but the registration among these latter remained seriously defective, both in Lower Canada and in the new province of Upper Canada.

In English-speaking Canada vital statistics were from the commencement incomplete, the pioneer settlers often going out into the wilds far from the authority of government and the ministrations of religion. Although from 1847 a law existed in Upper Canada requiring ministers of religion to deposit duplicates of their registers of baptisms, marriages and deaths with the clerks of the peace for transmission to the Provincial Secretary, this law remained practically a dead letter. Again, the efforts made to secure records of births and deaths at the censuses of 1851 and 1861 produced most unsatisfactory and even ridiculous results, as was pointed out by Dr. J. C. Taché, Secretary of the Board of Registration and Statistics, in a memorial published in the report of the Canadian Minister of Agriculture for 1865. Nevertheless, in spite of the inherent unsoundness of securing, at a point of time in a decennial census, a record of births and deaths occurring over a considerable period of time, this method was followed down to 1911, when the obviously untrustworthy character of the results led to the discarding of the data obtained at the inquiry.

The Dominion Government instituted in the early '80's a plan for compiling the annual mortuary statistics of cities of 25,000 population and over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax and Saint John. By 1891 the list had grown to 25, at a time when, in most of the provinces, the only birth and death statistics were those of the municipalities. Upon the organization of provincial bureaus of vital statistics, however, this work was abandoned, though a conference of Dominion and provincial officials, held in 1893, passed a resolution calling upon the provincial and Dominion authorities to cooperate in the work of collecting, compiling and publishing the vital statistics of the Dominion. This resolution had no immediate practical results in securing accurate or comparable vital statistics.

Following Confederation each of the provinces of the Dominion had enacted its own legislation on vital statistics, where such existed, and administered this legislation according to its own individual methods. While the vital statistics of Ontario were published in considerable detail annually from 1871, the arrangements for the collection of data were unsatisfactory. Only in 1906 was the publication of vital statistics begun in Prince Edward Island (no report for 1912 was ever issued). In Nova Scotia no vital statistics were published between 1876 and 1908 and in New Brunswick no vital statistics were available until 1920. Because of the *lacunæ*, and even more because of the incomparability of information collected, of methods of collection and of standard of enforcement, Canadian vital statistics remained extremely unsatisfactory and impossible of compilation on a national basis, as was pointed out by the 1912 Commission on Official Statistics, which recommended that "for the Dominion, now engaged in building up its national unity, it is important that uniform data should render possible to statisticians the institution of true interprovincial and international comparisons. By effective co-operation of the provinces with the Dominion, this object should be capable of attainment without sacrificing the liberty of each province to satisfy its own special statistical requirements".

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[1] This chapter has been revised by E. S. Macphail, Chief, Demography Branch, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Population".

[2] For a summary of the vital statistics of the Roman Catholic population from 1610 to 1883, see the Statistical Year Book of Quebec, 1921, English or French edition, p. 51. For details, by years, of this movement of population, see Vol. V of the Census of Canada, 1871, pp. 160 265, and Vol. IV of the Census of Canada, 1881, pp. 134-145.

The scheme of co-operation thus outlined was brought into effect as a consequence of the establishment of the Dominion Bureau of Statistics under the Statistics Act of 1918, which specifically provided that the Bureau should publish an annual report on vital statistics. A scheme was first drawn up in the Bureau and submitted to the various provinces; then Dominion-Provincial conferences on vital statistics were held in June and December, 1918, when comprehensive and final discussions took place.

At the conferences of 1918, it was agreed: (1) that the model Vital Statistics Act prepared by the Dominion Bureau of Statistics, when accepted by the Legislatures, should form the basis of the vital statistics legislation of the several provinces, thus securing uniformity and comparability; (2) that the provinces should undertake to obtain the returns of births, marriages and deaths on the prescribed forms as approved and adopted at the conference, the Dominion Bureau of Statistics to supply the forms free of charge; (3) that the provinces should forward to the Dominion Bureau of Statistics, at such times as might be agreed upon, either the original returns of births, marriages and deaths, or certified transcriptions of the same; the Bureau of Statistics to undertake the mechanical compilation and tabulation.

Under the scheme outlined above, the vital statistics for all the provinces except Quebec were secured and compiled on a uniform basis for the years 1921 to 1925. The annual reports for these years may be obtained on application to the Dominion Statistician.

Quebec has been included in the registration area as from Jan. 1, 1926, from which date her statistics are on a comparable basis with those of the other provinces. The final reports for 1926 to 1930, including the statistics of all the nine provinces, have appeared and may be procured from the Dominion Statistician.

The vital statistics of Yukon and the Northwest Territories have been collected and compiled since 1924. They are not, however, presented with those of the nine provinces in the tables of this chapter because the figures are not regarded as complete, the details are in many cases not available, and the small and varying population is not known with sufficient accuracy for each year to enable the rates to be calculated. As these territories contain less than 1/700th of the population of Canada, their vital statistics are a negligible factor in the total. Births, marriages and deaths in Yukon and the Northwest Territories, for the years 1924-30, are summarized in the statement herewith:—

VITAL STATISTICS OF YUKON AND THE NORTHWEST TERRITORIES, 1924-30.

Year.	Yukon.			The Northwest Territories.		
	Births.	Marriages.	Deaths.	Births.	Marriages.	Deaths.
	No.	No.	No.	No.	No.	No.
1924	31	5	38	95	39	47
1925	22	17	63	57	35	32
1926	27	12	68	75	3	51
1927	29	19	33	126	20	133
1928	30	13	46	222	30	367
1929	35	10	54	133	29	168
1930	45	17	69	232	36	206

Two important considerations should be borne in mind by the students who use either the tables which follow or the detailed reports issued by the Bureau of Statistics for comparative purposes. First, in spite of the improvements of the past decade, registration generally, and the registration of births in particular, is not universally carried out. The great extent of the country and the isolation of many of its inhabitants partly account for this unsatisfactory situation. Secondly, the very considerable differences in the age and sex distribution of the population in different provinces make comparisons of crude birth rates and crude death rates as among the provinces unfair and misleading.

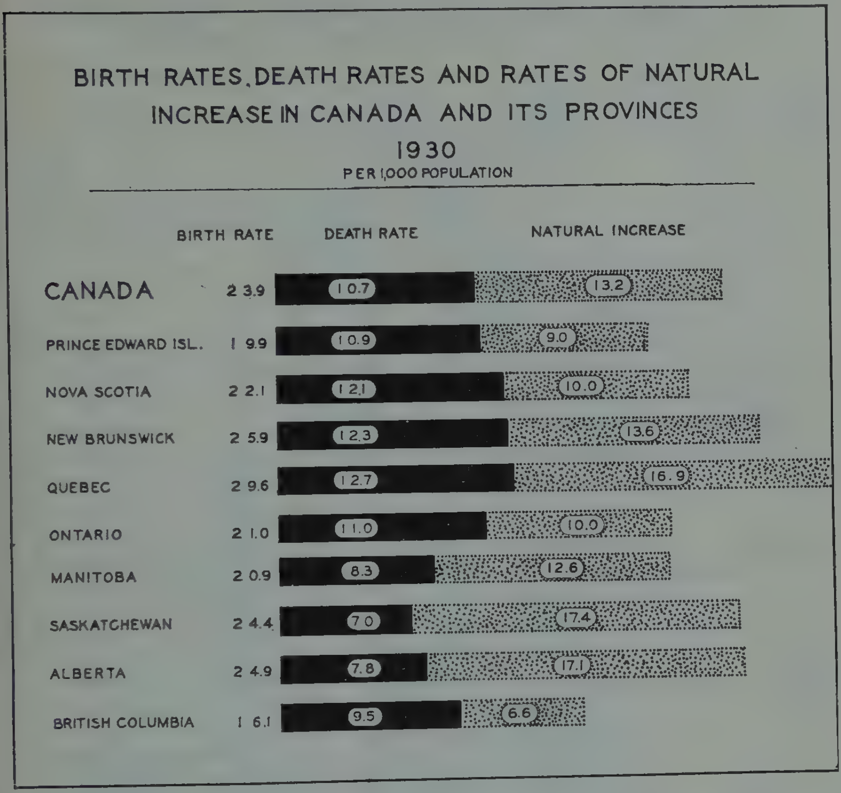
All rates in this chapter have been recalculated on the basis of the revised estimates of population given on p. 145.

The natural increase of the population of Canada is first dealt with, followed by detailed tables of births, marriages and deaths in the order named.

Section 1.—Natural Increase.

Summary statistics of the births, marriages, deaths and natural increase per 1,000 of population are given for the years 1921 to 1931, by provinces, in Table **1.**

The province of Quebec is regarded as having one of the highest rates of natural increase per 1,000 population of any civilized area, but for each year since 1926 with the single exception of the latest year 1931, Saskatchewan has outranked Quebec in this respect, owing to its younger population and lower crude death rate. In 1930, for similar reasons, Alberta also surpassed Quebec in rate of natural increase. The high rates for these provinces brought the averages for Canada up to 13·3 in 1926, 13·4 in 1927, 13·0 in 1928, 12·2 in 1929, 13·2 in 1930 and 13·1 in 1931. The rate of natural increase in 1931 was 9·5 per 1,000 in Australia, 10·1 in New Zealand, 3·5 in England and Wales, 5·7 in Scotland and 4·8 in the Irish Free State, so that Canada compares quite favourably with other British countries.



The rates of natural increase per 1,000 of mean population for other countries in the latest years are as follows, the figures being for 1930: Denmark, 7·9; Japan, 14·2; Netherlands, 13·9; Norway, 6·5; Finland, 7·4; Italy, 12·6; Switzerland, 5·6; Sweden, 3·7; Spain, 11·6; France, 2·4; Belgium, 5·6; United States (registration area), 7·6; Union of South Africa (whites), 16·9.

It will be noticed that the rate of natural increase of the population of Canada showed a tendency to decline between the years 1927 and 1929, while the 1926 rate of 13·3 was a very sharp drop from that of 17·8 recorded for the census year 1921. The rate for 1930 however showed a decided betterment over 1929 and the improvement was practically maintained in 1931.

Statistics of the births, marriages, deaths and natural increase in cities and towns of 10,000 and over are given for the calendar year 1930 in Table **2**, but these are not worked out as rates per 1,000 of population, though the census population in 1931, which is also given, furnishes some guide to the rate of natural increase. Particularly notable in this table is the larger proportionate number of births in such cities as Montreal and Quebec, as compared with Toronto, Hamilton, Ottawa, Winnipeg and Vancouver. This higher birth rate is in part counterbalanced by a considerably higher death rate, but the natural increase in Quebec cities is still considerably higher than in the cities of other provinces.

1.—Summary of Births, Marriages, Deaths and Natural Increase, by Provinces, for the calendar years 1926-31, with Averages 1921-25 and 1926-30.

NOTE.—For other than census years birth, marriage and death rates are calculated on estimated populations (see p. 145). Figures for 1921-25 will be found at p. 160 of the 1927-28 Year Book.

Province.	Births.	Birth Rate per 1,000 Population.	Marriages.	Marriage Rate per 1,000 Population.	Deaths.	Death Rate per 1,000 Population.	Excess of Births over Deaths.	Rate of Natural Increase per 1,000 Population.
	No.		No.		No.		No.	
Prince Edward Island..Av. 1921-25	1,966	22·6	473	5·4	1,085	12·5	881	10·1
Av. 1926-30	1,734	19·7	473	5·4	969	11·0	765	8·7
1926	1,752	20·1	459	5·3	898	10·3	854	9·8
1927	1,697	19·5	482	5·5	913	10·5	784	9·0
1928	1,806	20·5	466	5·3	952	10·8	854	9·7
1929	1,670	19·0	469	5·3	1,122	12·8	548	6·2
1930	1,749	19·9	488	5·5	961	10·9	788	9·0
1931	1,879	21·4	490	5·6	912	10·4	967	11·0
Nova Scotia............Av. 1921-25	12,119	23·4	3,186	6·1	6,519	12·6	5,600	10·8
Av. 1926-30	11,016	21·4	3,224	6·3	6,362	12·4	4,654	9·0
1926	10,980	21·3	2,861	5·6	6,366	12·4	4,614	8·9
1927	11,134	21·6	3,042	5·9	6,378	12·4	4,756	9·2
1928	10,931	21·2	3,256	6·3	6,202	12·0	4,729	9·2
1929	10,688	20·8	3,510	6·8	6,660	12·9	4,028	7·9
1930	11,346	22·1	3,451	6·7	6,206	12·1	5,140	10·0
1931	11,615	22·6	3,394	6·6	5,968	11·6	5,647	11·0
New Brunswick........Av. 1921-25	11,080	28·4	2,953	7·6	5,093	13·1	5,987	15·3
Av. 1926-30	10,327	25·8	2,970	7·4	5,019	12·5	5,308	13·3
1926	10,340	26·1	2,938	7·4	5,002	12·6	5,338	13·5
1927	10,479	26·3	2,887	7·3	4,902	12·3	5,577	14·0
1928	10,047	25·1	3,146	7·8	4,972	12·4	5,075	12·7
1929	10,235	25·3	3,118	7·7	5,230	12·9	5,005	12·4
1930	10,534	25·9	2,761	6·8	4,991	12·3	5,543	13·6
1931	10,801	26·5	2,544	6·2	4,644	11·4	6,157	15·1
Quebec[1]...............Av. 1926-30	82,771	30·5	18,731	6·9	36,645	13·5	46,126	17·0
1926	82,165	31·6	17,827	6·8	37,251	14·3	44,914	17·3
1927	83,064	31·3	18,551	7·0	36,175	13·6	46,889	17·7
1928	83,621	30·8	19,126	7·0	36,632	13·5	46,989	17·3
1929	81,380	29·4	19,610	7·1	37,221	13·4	44,159	16·0
1930	83,625	29·6	18,543	6·6	35,945	12·7	47,680	16·9
1931	83,606	29·1	16,783	5·8	34,487	12·0	49,119	17·1
Ontario................Av. 1921-25	71,454	23·7	24,037	8·0	34,252	11·3	37,202	12·4
Av. 1926-30	68,703	21·0	25,449	7·8	36,650	11·2	32,053	9·8
1926	67,617	21·4	23,632	7·5	35,909	11·3	31,708	10·1
1927	67,671	21·0	24,677	7·7	34,775	10·8	32,896	10·2
1928	68,510	20·9	25,728	7·8	37,128	11·3	31,382	9·6
1929	68,458	20·5	27,605	8·3	38,123	11·4	30,335	9·1
1930	71,263	21·0	25,605	7·6	37,313	11·0	33,950	10·0
1931	69,209	20·2	23,771	6·9	35,705	10·4	33,504	9·8
Manitoba...............Av. 1921-25	16,590	26·8	4,634	7·5	5,348	8·6	11,242	18·2
Av. 1926-30	14,391	21·7	4,951	7·5	5,507	8·3	8,884	13·4
1926	14,661	22·9	4,537	7·1	5,335	8·3	9,326	14·6
1927	14,147	21·7	4,716	7·2	5,309	8·2	8,838	13·5
1928	14,504	21·8	5,170	7·8	5,396	8·1	9,108	13·7
1929	14,236	21·0	5,269	7·8	5,808	8·6	8,428	12·4
1930	14,411	20·9	5,061	7·3	5,685	8·3	8,726	12·6
1931	14,376	20·5	4,888	7·0	5,319	7·6	9,057	12·9
Saskatchewan..........Av. 1921-25	21,580	27·7	4,982	6·4	5,859	7·5	15,721	20·2
Av. 1926-30	21,298	24·7	6,036	7·0	6,256	7·3	15,042	17·4
1926	20,716	25·2	5,483	6·7	6,060	7·4	14,656	17·8
1927	21,015	25·0	5,733	6·8	6,031	7·2	14,984	17·8
1928	21,261	24·7	6,701	7·8	6,166	7·2	15,095	17·5
1929	21,446	24·3	6,548	7·4	6,715	7·6	14,731	16·7
1930	22,051	24·4	5,717	6·3	6,309	7·0	15,742	17·4
1931	21,331	23·1	5,700	6·2	6,066	6·6	15,265	16·5
Alberta.................Av. 1921-25	15,461	26·0	4,313	7·3	4,953	8·3	10,508	17·7
Av. 1926-30	15,924	24·2	5,265	8·0	5,530	8·4	10,394	15·8
1926	14,456	23·8	4,503	7·4	5,159	8·5	9,297	15·3
1927	14,897	23·5	4,707	7·4	5,059	8·0	9,838	15·5
1928	15,692	23·8	5,776	8·8	5,699	8·7	9,993	15·1
1929	16,924	24·7	6,004	8·8	6,239	9·1	10,685	15·6
1930	17,649	24·9	5,334	7·5	5,496	7·8	12,153	17·1
1931	17,252	23·6	5,142	7·0	5,302	7·2	11,950	16·4

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[1] Quebec was not included in the registration area prior to 1926.

1.—Summary of Births, Marriages, Deaths and Natural Increase, by Provinces, for the calendar years 1926-31, with Averages 1921-25 and 1926-30—concluded.

Province.		Births.	Birth rate per 1,000 Population.	Marriages.	Marriage rate per 1,000 Population.	Deaths.	Death rate per 1,000 Population.	Excess of Births over Deaths.	Rate of Natural Increase per 1,000 Population.
		No.		No.		No.		No.	
British Columbia	Av. 1921-25	10,256	18·4	3,971	7·1	4,812	8·7	5,444	9·7
	Av. 1926-30	10,356	16·2	4,786	7·5	5,986	9·3	4,370	6·9
	1926	10,063	16·6	4,418	7·3	5,474	9·0	4,589	7·6
	1927	10,084	16·2	4,720	7·6	5,750	9·2	4,334	7·0
	1928	10,385	16·2	4,942	7·7	5,910	9·2	4,475	7·0
	1929	10,378	15·7	5,155	7·8	6,397	9·7	3,981	6·0
	1930	10,867	16·1	4,697	6·9	6,400	9·5	4,467	6·6
	1931	10,404	15·0	3,879	5·6	6,114	8·8	4,290	6·2
Canada (Exclusive of the Territories)	**Av. 1926-30**	**236,520**	**24·1**	**71,885**	**7·3**	**108,924**	**11·1**	**127,596**	**13·0**
	1926	**232,750**	**24·7**	**66,658**	**7·1**	**107,454**	**11·4**	**125,296**	**13·3**
	1927	**234,188**	**24·3**	**69,515**	**7·2**	**105,292**	**10·9**	**128,896**	**13·4**
	1928	**236,757**	**24·1**	**74,311**	**7·6**	**109,057**	**11·1**	**127,700**	**13·0**
	1929	**235,415**	**23·5**	**77,288**	**7·7**	**113,515**	**11·3**	**121,900**	**12·2**
	1930	**243,495**	**23·9**	**71,657**	**7·0**	**109,306**	**10·7**	**134,189**	**13·2**
	1931	**240,473**	**23·2**	**66,591**	**6·4**	**104,517**	**10·1**	**135,956**	**13·1**

2.—Summary of Births, Marriages, Deaths and Excess of Births over Deaths, in Cities and Towns of 10,000 Population and Over, calendar year 1930.

Province and City or Town.	Census Population, 1931.	Births.	Marriages.	Deaths.	Excess of Births over Deaths.
	No.	No.	No.	No.	No.
Prince Edward Island—					
Charlottetown	12,361	336	162	283	53
Nova Scotia—					
Glace Bay	20,706	745	135	308	437
Halifax	59,275	1,555	711	863	692
Sydney	23,089	615	176	224	391
New Brunswick—					
Moncton	20,689	525	195	273	252
Saint John	47,514	1,224	397	685	539
Quebec—					
Chicoutimi	11,877	498	91	174	324
Granby	10,587	338	93	109	229
Hull	29,433	1,019	248	331	688
Joliette	10,765	332	74	181	151
Lachine	18,630	417	128	196	221
Lévis	11,724	309	44	218	91
Montreal	818,577	21,044	6,551	10,979	10,065
Outremont	28,641	123	178	135	—12
Quebec	130,594	4,454	892	2,481	1,973
St. Hyacinthe	13,448	376	120	325	51
St. Jean	11,256	326	83	116	210
Shawinigan Falls	15,345	653	79	191	462
Sherbrooke	28,933	832	223	442	390
Sorel	10,320	303	70	181	122
Thetford Mines	10,701	531	44	166	365
Three Rivers	35,450	1,350	212	542	808
Valleyfield	11,411	340	98	168	172
Verdun	60,745	1,129	387	424	705
Westmount	24,235	365	287	261	104
Ontario—					
Belleville	13,790	395	148	242	153
Brantford	30,107	732	279	395	337
Chatham	14,569	565	154	320	245

2.—Summary of Births, Marriages, Deaths and Natural Increase, in Cities and Towns of 10,000 Population and Over, calendar year 1930—concluded.

Province and City or Town.	Census Population, 1931.	Births.	Marriages.	Deaths.	Excess of Births over Deaths.
	No.	No.	No.	No.	No.
Ontario—concluded.					
Cornwall	11,126	482	153	225	257
East Windsor	14,251	372	93	58	314
Fort William	26,277	623	232	208	415
Galt	14,006	311	102	189	122
Guelph	21,075	409	182	233	176
Hamilton	155.547	3,394	1,466	1,506	1,888
Kingston	23,439	659	231	512	147
Kitchener	30,793	829	326	348	481
London	71,148	1,485	626	1,080	405
Niagara Falls	19,046	438	228	209	229
North Bay	15,528	417	125	180	237
Oshawa	23,439	686	205	234	452
Ottawa	126,872	3.028	1,000	1,747	1,281
Owen Sound	12,839	313	137	157	156
Peterborough	22,327	639	204	304	335
Port Arthur	19,818	564	206	241	323
St. Catharines	24,753	671	279	322	349
St. Thomas	15,430	322	145	228	94
Sandwich	10,715	196	67	76	120
Sarnia	18,191	450	131	238	212
Sault Ste. Marie	23,082	642	225	230	412
Stratford	17,742	406	127	208	198
Sudbury	18,518	720	395	296	424
Timmins	14,200	506	152	126	380
Toronto	631,207	13,591	7,111	7,057	6,534
Walkerville	10,105	661	133	203	458
Welland	10,709	298	189	165	133
Windsor	63,108	1,510	840	612	898
Woodstock	11,395	272	91	162	110
Manitoba—					
Brandon	17,082	374	221	243	131
St. Boniface	16,305	980	147	502	478
Winnipeg	218,785	4,629	2,667	1,807	2,822
Saskatchewan—					
Moose Jaw	21,299	596	280	218	378
Regina	53,209	1,664	754	507	1,157
Saskatoon	43,291	1,235	736	499	736
Alberta—					
Calgary	83,761	2,064	1,169	781	1,283
Edmonton	79,197	2,391	1,339	876	1,515
Lethbridge	13,489	581	262	199	382
Medicine Hat	10,300	462	156	148	314
British Columbia—					
New Westminster	17,524	555	193	282	273
Vancouver	246,593	4,003	2,250	2,281	1.722
Victoria	39,082	734	360	607	127

Natural Increase by Sex.—According to Table 3, the number of male children born in 1930 in Canada exceeded the total male deaths for the year by 65,743, while the gain in the female population during the same period was 68,446. Thus, while the number of male children born exceeded the females by 6,209, the higher mortality among males, *viz.*, 59,109 as compared with 50,197, resulted in a net excess of the natural increase of the females amounting to 2,703. Figures for 1931 are as follows: males, births 123,622, deaths 56,529, natural increase 67,093; females, births 116,851, deaths 47,988, natural increase 68,863.

3.—Births, Deaths and Excess of Births over Deaths in Canada, by Provinces and for each Sex, 1930, with Totals for 1921-30.

Province.	Males.			Females.			Both Sexes.
	Births.	Deaths.	Excess of Births over Deaths.	Births.	Deaths.	Excess of Births over Deaths.	Excess of Births over Deaths.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island..	912	511	401	837	450	387	788
Nova Scotia...........	5,902	3,279	2,623	5,444	2,927	2,517	5,140
New Brunswick.........	5,385	2,617	2,768	5,149	2,374	2,775	5,543
Quebec................	42,992	18,824	24,168	40,633	17,121	23,512	47,680
Ontario...............	36,392	19,827	16,565	34,871	17,486	17,385	33,950
Manitoba..............	7,353	3,191	4,162	7,058	2,494	4,564	8,726
Saskatchewan..........	11,407	3,670	7,737	10,644	2,639	8,005	15,742
Alberta...............	8,944	3,171	5,773	8,705	2,325	6,380	12,153
British Columbia......	5,565	4,019	1,546	5,302	2,381	2,921	4,467
Totals, 1930.......	**124,852**	**59,109**	**65,743**	**118,643**	**50,197**	**68,446**	**134,189**
Totals, 1929......	**120,891**	**60,920**	**59,971**	**114,524**	**52,595**	**61,929**	**121,900**
Totals, 1928........	**121,505**	**58,480**	**63,025**	**115,252**	**50,577**	**64,675**	**127,700**
Totals, 1927........	**120,655**	**56,265**	**64,390**	**113,533**	**49,027**	**64,506**	**128,896**
Totals, 1926........	**119,863**	**56,979**	**62,884**	**112,887**	**50,475**	**62,412**	**125,296**
Totals, 1925.......	**124,686**	**52,450**	**72,236**	**117,702**	**46,327**	**71,375**	**143,611**
Totals, 1924........	**125,590**	**52,227**	**73,363**	**118,935**	**46,326**	**72,609**	**145,972**
Totals, 1923........	**124,003**	**55,490**	**68,513**	**116,473**	**49,840**	**66,633**	**135,146**
Totals, 1922........	**129,055**	**54,505**	**74,550**	**123,516**	**47,982**	**75,534**	**150,084**
Totals, 1921........	**133,839**	**53,685**	**80,154**	**123,889**	**47,470**	**76,419**	**156,573**

Section 2.—Births.

Throughout almost the whole of the civilized world the birth rate has in the past generation been on the decline, though the consequent reduction in the rate of natural increase has been partly offset by the synchronous decline in the death rate.

The crude birth rate of England and Wales, for example, was 35·4 per 1,000 population on the average of the decennium 1871-80, 32·5 in 1881-90 and 29·9 in 1891-1900. In 1913 the birth rate was 24·1, and, though it rose to 25·5 in 1920, it fell again to 22·4 in 1921, 19·7 in 1923, 18·8 in 1924, 18·3 in 1925, 17·8 in 1926, 16·6 in 1927, 16·7 in 1928, 16·3 in 1929 and 1930, and 15·8 in 1931.

Similarly, in France the crude birth rate declined from an average of 25·4 per 1,000 population in the 1870's, 23·9 in the 1880's and 22·2 in the 1890's to 21·4 in 1920 and 19·1 in 1923, rising slightly to 19·0 in 1925 and falling to 18·8 in 1926, 18·1 in 1930 and 17·4 in 1931. In Germany, again, the crude birth rate was 39·1 in the 1870's, 36·8 in the 1880's, 36·1 in the 1890's, 25·9 in 1920, 20·7 in 1925, 17·5 in 1930 and 16·0 in 1931.

In Canada the crude birth rate still stands at a comparatively high figure, being 23·2 per 1,000 in 1931. This, however, was largely due to the influence of Quebec, where the birth rate stood at the high figure of 29·1 per 1,000 in 1931, as compared with 20·2 per 1,000 in Ontario. In the other provinces the figures varied from 15·0 and 20·5 per 1,000 in British Columbia and Manitoba to 23·6 and 26·5 in Alberta and New Brunswick respectively.

Statistics of births and birth rates for the years 1926-31 with averages for 1921-25 and 1926-30 are given by provinces in Table **4**. The averages for the former period are exclusive of the province of Quebec which was not then in the registration area.

4.—Numbers of Living Births and Birth Rates, by Provinces, 1926-31, with Averages, 1921-25 and 1926-30.

A.—NUMBERS OF LIVING BIRTHS.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
Average 1921-25	1,966	12,119	11,080	[1]	71,454	16,590	21,580	15,461	10,256	[1]
Average 1926-30	1,734	11,016	10,327	82,771	68,703	14,391	21,298	15,924	10,356	236,520
1926	1,752	10,980	10,340	82,165	67,617	14,661	20,716	14,456	10,063	232,750
1927	1,697	11,134	10,479	83,064	67,671	14,147	21,015	14,897	10,084	234,188
1928	1,806	10,931	10,047	83,621	68,510	14,504	21,261	15,692	10,385	236,757
1929	1,670	10,688	10,235	81,380	68,458	14,236	21,446	16,924	10,378	235,415
1930	1,749	11,346	10,534	83,625	71,263	14,411	22,051	17,649	10,867	243,495
1931	1,879	11,615	10,801	83,606	69,209	14,376	21,331	17,252	10,404	240,473

B.—BIRTH RATES PER 1,000 POPULATION.

Average 1921-25	22·6	23·4	28·4	[1]	23·7	26·8	27·7	26·0	18·4	[1]
Average 1926-30	19·7	21·4	25·8	30·5	21·0	21·7	24·7	24·2	16·2	24·1
1926	20·1	21·3	26·1	31·6	21·4	22·9	25·2	23·8	16·6	24·7
1927	19·5	21·6	26·3	31·3	21·0	21·7	25·0	23·5	16·2	24·3
1928	20·5	21·2	25·1	30·8	20·9	21·8	24·7	23·8	16·2	24·1
1929	19·0	20·8	25·3	29·4	20·5	21·0	24·3	24·7	15·7	23·5
1930	19·9	22·1	25·9	29·6	21·0	20·9	24·4	24·9	16·1	23·9
1931	21·4	22·6	26·5	29·1	20·2	20·5	23·1	23·6	15·0	23·2

[1] Quebec was not included in the registration area prior to 1926.

Table 5 gives the number of living births in cities and towns of 10,000 population and over for the years 1927 to 1931 inclusive. The number of births reported shows in most cases an increase in recent years up to 1930 but the decreases in 1931 outnumbered the increases.

5.—Living Births in Cities and Towns of 10,000 Population and Over, 1927-31.[1]

City or Town.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.
Belleville, Ont.	371	371	366	395	424
Brandon, Man.	376	419	406	374	369
Brantford, Ont.	647	711	712	732	686
Calgary, Alta.	1,641	1,752	2,006	2,064	1,885
Charlottetown, P.E.I.	271	273	266	336	371
Chatham, Ont.	453	494	475	565	456
Chicoutimi, Que.	609	593	555	498	490
Cornwall, Ont.	467	488	492	482	460
East Windsor, Ont.	365	347	403	372	302
Edmonton, Alta.	1,940	2,149	2,271	2,391	2,400
Fort William, Ont.	602	664	645	623	657
Galt, Ont.	265	266	284	311	321
Glace Bay, N.S.	666	681	667	745	693
Granby, Que.	271	303	334	338	388
Guelph, Ont.	418	362	380	409	363
Halifax, N.S.	1,494	1,425	1,454	1,555	1,651
Hamilton, Ont.	2,866	3,007	3,166	3,394	3,320
Hull, Que.	1,062	999	906	1,019	985
Joliette, Que.	348	371	317	332	343
Kingston, Ont.	594	576	619	659	645
Kitchener, Ont.	688	751	812	829	851
Lachine, Que.	440	464	464	417	491
Lethbridge, Alta.	348	416	487	581	572
Lévis, Que.	315	313	310	309	285

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[1] Living births in cities of 40,000 population and over, except Montreal and Quebec, are given for 1921-23 on p. 137 in the Canada Year Book of 1930.

5.—Living Births in Cities and Towns of 10,000 Population and Over, 1927-31[1]—concluded.

City or Town.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.
London, Ont	1,286	1,438	1,364	1,485	1,452
Medicine Hat, Alta	328	377	451	462	401
Moncton, N.B	499	482	561	525	557
Montreal, Que	19,458	20,252	20,622	21,044	20,571
Moose Jaw, Sask	626	617	629	596	512
New Westminster, B.C	491	535	537	555	588
Niagara Falls, Ont	492	445	501	438	463
North Bay, Ont	406	435	406	417	408
Oshawa, Ont	595	703	727	686	607
Ottawa, Ont	3,003	3,003	2,924	3,028	3,047
Outremont, Que	135	109	127	123	99
Owen Sound, Ont	297	368	376	313	338
Peterborough, Ont	545	558	617	639	612
Port Arthur, Ont	510	558	582	564	504
Quebec, Que	4,349	4,473	4,456	4,454	4,462
Regina, Sask	1,203	1,363	1,517	1,664	1,511
St. Boniface, Man	752	829	893	980	1,015
St. Catharines, Ont	577	570	570	671	627
St. Hyacinthe, Que	317	315	362	376	371
St. Jean, Que	322	337	306	326	316
Saint John, N.B	1,166	1,083	1,150	1,224	1,216
St. Thomas, Ont	329	341	306	322	300
Sandwich, Ont	255	218	208	196	168
Sarnia, Ont	435	426	470	450	464
Saskatoon, Sask	962	1,045	1,137	1,235	1,144
Sault Ste. Marie, Ont	578	627	665	642	635
Shawinigan Falls, Que	670	703	642	653	625
Sherbrooke, Que	809	753	818	832	799
Sorel, Que	304	293	293	303	315
Stratford, Ont	372	401	377	406	392
Sudbury, Ont	378	453	565	720	830
Sydney, N.S	501	484	502	615	643
Thetford Mines, Que	443	492	510	531	418
Three Rivers, Que	1,327	1,444	1,289	1,350	1,327
Timmins, Ont	471	432	533	506	531
Toronto, Ont	11,448	12,342	12,485	13,591	12,709
Valleyfield, Que	322	322	294	340	352
Vancouver, B.C.[2]	3,651	3,812	3,869	4,003	3,730
Verdun, Que	1,007	1,058	1,095	1,129	1,161
Victoria, B.C	664	723	754	734	688
Walkerville, Ont	125	425	624	661	643
Welland, Ont	283	279	318	298	303
Westmount, Que	38	42	51	365	356
Windsor, Ont	2,088	1,681	1,654	1,510	1,242
Winnipeg, Man	4,506	4,552	4,452	4,629	4,451
Woodstock, Ont	245	225	274	272	259

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[1] Living births in cities of 40,000 population and over, except Montreal and Quebec, are given for 1921-28 on p. 137 in the Canada Year Book of 1930.

[2] Though Point Grey and South Vancouver were not incorporated into Vancouver until Jan. 1, 1929, their statistics are included in the figures for Vancouver for the years 1927 and 1928 for purposes of comparison.

Legitimate Births.—In Table 6 will be found for each of the provinces the percentages of legitimate children born alive to Canadian-born, British-born and foreign-born mothers respectively in 1930. It is noteworthy that children born to foreign-born mothers outnumbered children born to Canadian-born mothers in the province of Alberta. For the Dominion as a whole, 72·7 p.c. of the children of mothers whose birthplaces were known had Canadian-born mothers, 12·0 p.c. British-born mothers and 15·2 p.c. foreign-born mothers.

It is also significant that the percentage of legitimate children born alive to Canadian-born mothers increased between 1921 and 1930 from 42·3 p.c. to 55·3 p.c. in Manitoba, from 36·1 p.c. to 47·2 p.c. in Saskatchewan, from 30·0 p.c. to 39·4 p.c. in Alberta, and from 29·7 p.c. to 43·2 p.c. in British Columbia. Thus more and more of the children of the West are coming within the class of third generation Canadians.

6.—Percentages of Legitimate Children Born Alive to Canadian-Born, British-Born or Foreign-Born Mothers, by Provinces, 1930.

Province.	Canadian-born.	British-born.	Foreign-born.
	p.c.	p.c.	p.c.
Prince Edward Island	95·1	1·9	3·0
Nova Scotia	85·8	10·1	4·1
New Brunswick	92·4	3·1	4·5
Quebec	93·1	2·8	4·2
Ontario	67·4	20·4	12·2
Manitoba	55·3	15·4	29·3
Saskatchewan	47·2	12·2	40·5
Alberta	39·4	16·5	44·0
British Columbia	43·2	29·4	27·4
Canada (Exclusive of the Territories)	**72·7**	**12·0**	**15·2**

Sex of Living Births.—Table 7 shows the number and proportion of living male and female births reported for each province in Canada during the calendar years 1926 to 1931, with averages for the five-year periods 1921-25 and 1926-30. The figures for Quebec commence only with the year 1926 when that province entered the registration area, and the totals for Canada are limited in the same manner in consequence. Of the figures listed, the only case of an excess of female births is in British Columbia in 1928. The table shows that among every 1,000 born in 1931 in the whole of Canada, 514 were males and 486 females. In other words, there were 1,058 males born to every 1,000 females.

7.—Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, for Canada and by Provinces, 1926-31, with Averages for 1921-25 and 1926-30.

NOTE.—For corresponding figures for 1921-25, see p. 165, Canada Year Book for 1927-28.

Province.		Total.	Males.		Females.		Males to 1,000 Females.
			Number.	Per cent of Total.	Number.	Per cent of Total.	
Prince Edward Island	Av. 1921-25	1,966	993	50·5	973	49·5	1,021
	Av. 1926-30	1,734	898	51·8	836	48·2	1,074
	1926	1,752	887	50·6	865	49·4	1,025
	1927	1,697	890	52·4	807	47·6	1,103
	1928	1,806	947	52·4	859	47·6	1,102
	1929	1,670	856	51·3	814	48·7	1,052
	1930	1,749	912	52·1	837	47·9	1,090
	1931	1,879	998	53·1	881	46·9	1,133
Nova Scotia	Av. 1921-25	12,119	6,275	51·8	5,844	48·2	1,074
	Av. 1926-30	11,016	5,653	51·3	5,363	48·7	1,054
	1926	10,980	5,638	51·3	5,342	48·7	1,055
	1927	11,134	5,704	51·2	5,430	48·8	1,050
	1928	10,931	5,533	50·6	5,398	49·4	1,025
	1929	10,688	5,487	51·3	5,201	48·7	1,055
	1930	11,346	5,902	52·0	5,444	48·0	1,084
	1931	11,615	5,931	51·1	5,684	48·9	1,043
New Brunswick	Av. 1921-25	11,080	5,708	51·5	5,372	48·5	1,063
	Av. 1926-30	10,327	5,292	51·2	5,035	48·8	1,051
	1926	10,340	5,294	51·2	5,046	48·8	1,049
	1927	10,479	5,391	51·4	5,088	48·6	1,060
	1928	10,047	5,152	51·3	4,895	48·7	1,053
	1929	10,235	5,240	51·2	4,995	48·8	1,049
	1930	10,534	5,385	51·1	5,149	48·9	1,046
	1931	10,801	5,548	51·4	5,253	48·6	1,056
Quebec[1]	Av. 1926-30	82,771	42,644	51·5	40,127	48·5	1,063
	1926	82,165	42,475	51·7	39,690	48·3	1,070
	1927	83,064	42,813	51·5	40,251	48·5	1,064
	1928	83,621	43,049	51·5	40,572	48·5	1,061
	1929	81,380	41,893	51·5	39,487	48·5	1,061
	1930	83,625	42,992	51·4	40,633	48·6	1,058
	1931	83,606	43,051	51·5	40,555	48·5	1,062

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[1] Quebec was not included in the registration area prior to 1926.

7.—Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, for Canada and by Provinces, 1926-31, with Averages for 1921-25 and 1926-30—concluded.

NOTE.—For corresponding figures for 1921-25, see p. 165, Canada Year Book for 1927-28.

Province.	Total.	Males.		Females.		Males to 1,000 Females.
		Number.	Per cent of Total.	Number.	Per cent of Total.	
Ontario.....Av. 1921-25	71,454	36,725	51·4	34,729	48·6	1,057
Av. 1926-31	68,703	35,268	51·3	33,435	48·7	1,055
1926	67,617	34,742	51·4	32,875	48·6	1,057
1927	67,671	34,755	51·4	32,916	48·6	1,056
1928	68,510	35,299	51·5	33,211	48·5	1,063
1929	68,458	35,154	51·4	33,304	48·6	1,056
1930	71,263	36,392	51·1	34,871	48·9	1,044
1931	69,209	35,609	51·5	33,600	48·5	1,060
Manitoba.....Av. 1921-25	16,590	8,443	50·9	8,147	49·1	1,036
Av. 1926-30	14,391	7,399	51·4	6,992	48·6	1,058
1926	14,661	7,598	51·8	7,063	48·2	1,076
1927	14,147	7,434	52·5	6,713	47·5	1,107
1928	14,504	7,282	50·2	7,222	49·8	1,008
1929	14,236	7,330	51·5	6,906	48·5	1,061
1930	14,411	7,353	51·0	7,058	49·0	1,042
1931	14,376	7,255	50·5	7,121	49·5	1,019
Saskatchewan.....Av. 1921-25	21,580	11,119	51·5	10,461	48·5	1,063
Av. 1926-30	21,298	10,979	51·5	10,319	48·5	1,064
1926	20,716	10,651	51·4	10,065	48·6	1,058
1927	21,015	10,852	51·6	10,163	48·4	1,068
1928	21,261	10,983	51·7	10,278	48·3	1,069
1929	21,446	11,002	51·3	10,444	48·7	1,053
1930	22,051	11,407	51·7	10,644	48·3	1,072
1931	21,331	10,942	51·3	10,389	48·7	1,053
Alberta.....Av. 1921-25	15,461	7,887	51·0	7,574	49·0	1,041
Av. 1926-30	15,924	8,153	51·2	7,771	48·8	1,049
1926	14,456	7,410	51·3	7,046	48·7	1,052
1927	14,897	7,682	51·6	7,215	48·4	1,065
1928	15,692	8,091	51·6	7,601	48·4	1,064
1929	16,924	8,637	51·0	8,287	49·0	1,042
1930	17,649	8,944	50·7	8,705	49·3	1,027
1931	17,252	8,938	51·8	8,314	48·2	1,075
British Columbia.....Av. 1921-25	10,256	5,310	51·8	4,946	48·2	1,074
Av. 1926-30	10,356	5,266	50·8	5,090	49·2	1,035
1926	10,063	5,168	51·4	4,895	48·6	1,056
1927	10,084	5,134	50·9	4,950	49·1	1,037
1928	10,385	5,169	49·8	5,216	50·2	991
1929	10,378	5,292	51·0	5,086	49·0	1,041
1930	10,867	5,565	51·2	5,302	48·8	1,050
1931	10,404	5,350	51·4	5,054	48·6	1,059
Canada (Exclusive of the Territories).....Av. 1926-30	**236,520**	**121,552**	**51·4**	**114,968**	**48·6**	**1,057**
1926	**232,750**	**119,863**	**51·5**	**112,887**	**48·5**	**1,062**
1927	**234,188**	**120,655**	**51·5**	**113,533**	**48·5**	**1,063**
1928	**236,757**	**121,595**	**51·3**	**115,252**	**48·7**	**1,054**
1929	**235,415**	**120,891**	**51·4**	**114,524**	**48·6**	**1,056**
1930	**243,495**	**124,852**	**51·3**	**118,643**	**48·7**	**1,052**
1931	**240,473**	**123,622**	**51·4**	**116,851**	**48·6**	**1,058**

Ages of Parents.—Table 8 shows the age distribution of married fathers and mothers in the year 1926 (the first year for which the figures are available for the whole of Canada) and for 1928-30. The fathers and mothers in each of these years are arranged according to age and then divided into four equal groups. Each point of age at which a separation comes is called a quartile. To obtain these points of age it is assumed that those in the same year of age are evenly distributed from its lower to its upper limit. In similar manner the deciles divide fathers or mothers in each year into ten equal groups.

In 1930 one-quarter of the married fathers were under 27·84 years of age, one-half under 32·73 years and three-quarters under 38·76 years. One-quarter of the married mothers were under 24·03 years of age, one-half under 28·42 years and three-quarters under 33·89 years. Nine-tenths of the fathers were under 44·09 years and nine-tenths of the mothers under 38·48 years. It will be noted that the general tendency of the quartile and decile points over the five years is in a downward direction. In other words, parents are gradually becoming younger.

8.—Quartile and Decile Ages of Married Fathers and Mothers, 1926, 1928-30.

Position in Array, by Age.	Fathers.				Mothers.			
	1926.	1928.	1929.	1930.	1926.	1928.	1929.	1930.
First quartile..................Yrs.	28·35	28·15	27·98	27·84	24·43	24·25	24·10	24·03
Second quartile................ "	33·31	33·13	32·89	32·73	28·89	28·71	28·53	28·42
Third quartile................. "	39·01	38·98	38·83	38·76	34·26	34·16	33·81	33·89
First decile................... "	24·91	24·72	24·60	24·54	21·41	21·30	21·21	21·20
Second decile.................. "	27·28	27·12	26·93	26·83	23·50	23·35	23·20	23·16
Third decile................... "	29 35	29·04	28 93	28 80	25·34	25·12	24·20	24·88
Fourth decile.................. "	31·28	31·02	30·77	30·64	27·79	26·92	26·68	26·59
Fifth decile................... "	33·31	33·13	32·89	32 73	28·89	28·71	28·53	28·42
Sixth decile................... "	35·48	35·31	35·06	34 96	30·82	30·69	30·44	30·36
Seventh decile................. "	37·81	37·78	37·52	37·41	33·41	32·94	32·71	32·64
Eighth decile.................. "	40·40	40·38	40·25	40·21	35·61	35·51	35·30	35·26
Ninth decile................... "	44·19	44·21	44·11	44·09	38 69	38·65	38·54	38·48

Nativity of Parents.—Table 9 classifies the children born in 1930 by country of birth of parents, and furnishes some idea to what extent the coming generation of Canadian-born will be the offspring of Canadian-born, British-born or foreign-born parents. The term "country not specified", under country of birth, includes for the father illegitimate births and births of incomplete record, while for the mother it includes births of incomplete record only.

9.—Number and Percentage of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers Born in Specified Countries, 1930.

Country of Birth of Parents.	Numbers of Births with Father, Mother or Both Parents Born in Specified Country.			Percentages of Births with Father, Mother or Both Parents Born in Specified Country.		
	Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
	No.	No.	No.	p.c.	p.c.	p.c.
Canada..............................	164,750	176,235	148,586	67·7	72·4	61·0
England..............................	17,500	17,073	8,041	7·2	7·0	3·3
Ireland..............................	2,976	2,628	1,175	1·2	1·1	0·5
Scotland.............................	6,758	7,302	3,092	2·8	3·0	1·3
Wales................................	627	582	156	0·3	0·2	0·1
Other British Isles..................	103	71	16	[2]	[2]	[2]
Newfoundland.........................	1,077	1,070	522	0·4	0·4	0·2
Other British Possessions............	537	418	158	0 2	0·2	0·1
Austria..............................	3,265	2,580	1,964	1·3	1·1	0·8
Belgium..............................	610	515	337	0·3	0·2	0·1
Finland..............................	639	704	526	0·3	0·3	0·2
France...............................	462	386	161	0·2	0·2	0·1
Germany..............................	1,022	998	486	0·4	0·4	0·2
Hungary..............................	1,275	1,209	1,049	0·5	0·5	0·4
Italy................................	2,440	1,766	1,673	1·0	0·7	0·7
Norway...............................	1,022	721	454	0·4	0·3	0·2
Poland...............................	5,637	5,297	4,304	2·3	2·2	1·8
Russia[1]............................	5,858	4,939	3,776	2·4	2·0	1·6
Sweden...............................	932	635	356	0·4	0·3	0·1
Other European countries.............	4,645	3,645	2,837	1·9	1·5	1·2
China and Japan......................	1,097	994	944	0·5	0·4	0·4
Other Asiatic countries..............	302	216	185	0·1	0·1	0·1
United States........................	11,504	11,873	3,630	4·7	4·9	1·5
Country not specified................	8,457	1,638	230	3·5	0·7	0·1
Totals...........................	**243,495**	**243,495**	**184,658**[3]	**100·0**	**100·0**	**75·8**[4]

[1] Includes the Ukraine. [2] Less than one-tenth of one per cent. [3] This figure gives the number of children whose fathers and mothers were born in the same country. The difference between this figure (184,658) and the total number of births (243,495) represents the number of children (58,837) whose fathers and mothers were born in different countries. [4] This excludes the percentage (24·2) of "mixed parentage", *i.e.*, where the two parents were not born in the same country.

Origin of Parents.—Table **10** gives the number and percentage of births during 1930, distributed by the principal origins.

10.—Number and Percentage of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1930.

Origin of Parents.	Numbers of Births with Father, Mother or Both Parents of Specified Origin.			Percentages of Births with Father, Mother or Both Parents of Specified Origin.		
	Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
	No.	No.	No.	No.	No.	No.
English	52,470	55,583	36,877	21·5	22·8	15·1
Irish	21,956	21,087	9,563	9·0	8·7	3·9
Scotch	23,211	23,476	10,561	9·5	9·6	4·3
Welsh	889	838	182	0·4	0·3	0·1
French	90,152	93,315	85,619	37·0	38·3	35·2
German	11,157	12,022	8,199	4·6	4·9	3·4
Armenian	64	53	51	[1]	[1]	[1]
Austrian	1,152	1,255	901	0·5	0·5	0·4
Belgian	672	640	394	0·3	0·3	0·2
Bulgarian	53	26	22	[1]	[1]	[1]
Chinese	286	240	237	0·1	0·1	0·1
Czech and Slovak	765	774	608	0·3	0·3	0·2
Danish	836	680	360	0·3	0·3	0·1
Dutch	2,419	2,297	1,255	1·0	0·9	0·5
Finnish	699	892	634	0·3	0·4	0·3
Greek	293	181	173	0·1	0·1	0·1
Hebrew	2,194	2,182	2,130	0·9	0·9	0·9
Hindu	43	43	41	[1]	[1]	[1]
Hungarian	1,253	1,325	1,144	0·5	0·5	0·5
Icelandic	384	388	236	0·2	0·2	0·1
Indian	2,678	3,156	2,538	1·1	1·3	1·0
Italian	2,748	2,381	2,175	1·1	1·0	0·9
Japanese	849	847	842	0·3	0·3	0·3
Negro	367	409	331	0·2	0·2	0·1
Norwegian	1,973	2,005	994	0·8	0·8	0·4
Polish	3,176	3,561	2,542	1·3	1·5	1·0
Roumanian	644	604	447	0·3	0·2	0·2
Russian	2,202	2,014	1,591	0·9	0·8	0·7
Serbo-Croatian	542	525	465	0·2	0·2	0·2
Swedish	1,580	1,502	644	0·6	0·6	0·3
Swiss	337	239	100	0·1	0·1	[1]
Syrian	262	212	187	0·1	0·1	0·1
Ukrainian[4]	6,051	6,481	5,515	2·5	2·7	2·3
Other	289	264	172	0·1	0·1	0·1
Origin not specified	8,849	1,998	561	3·6	0·8	0·2
Totals	**243,495**	**243,495**	**178,291**[2]	**100·0**	**100·0**	**73·2**[3]

[1] Less than one-tenth of one per cent. [2] This figure gives the number of children whose fathers and mothers have the same origin. The difference between this figure (178,291) and the total number of births (243,495) represents the number of children (65,204) whose fathers and mothers are of different origins. [3] This excludes the percentage (26·8) of mixed parentage, *i.e.*, where the parents were not of the same origins. [4] Including Galician and Bukovinian.

Illegitimacy.—The ratio of illegitimate to total births is, generally speaking, low in Canada as compared with other countries.

Out of 243,495 living births in the nine provinces of Canada in 1930, 8,059, or 3·3 p.c., were returned as the issue of unmarried mothers. Figures for 1931 show a total of 240,473 living births, of which 8,365, or 3·5 p.c., were returned as the issue of unmarried mothers. Out of this number 4,359 were males and 4,006 females—a ratio of 1,088 males to every 1,000 females, as compared with 1,049 males per 1,000 females in 1930, and a general 1931 rate for all births of 1,058 males to 1,000 females.

11.—Number of Illegitimate Births, Classified by Age of Mother, with the Percentage to Total Living Births, by Provinces, 1930, with Totals for 1931.

Age Group of Mother.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 15 years	–	5	3	12	32	1	5	2	1	61
15–19 years	14	223	131	437	959	195	220	189	94	2,462
20–24 years	19	201	116	504	988	212	238	221	89	2,588
25–29 years	5	65	37	150	340	63	68	78	42	848
30–34 years	3	34	16	69	158	26	44	33	21	404
35–39 years	–	20	5	30	105	32	32	25	12	261
40–44 years	–	5	2	10	24	7	10	5	2	65
45–49 years	–	4	–	1	5	1	–	3	1	15
50 years and over	–	–	–	–	–	–	–	–	–	–
Not given	–	–	2	1,306	40	3	2	1	1	1,355
Totals—										
1930	**41**	**557**	**312**	**2,519**	**2,651**	**540**	**619**	**557**	**263**	**8,059**
1931	**71**	**630**	**367**	**2,450**	**2,773**	**513**	**638**	**635**	**288**	**8,365**
Per cent of all living births—										
1930	2·3	4·9	3·0	3·0	3·7	3·7	2·8	3·2	2·4	3·3
1931	3·8	5·4	3·4	2·9	4·0	3·6	3·0	3·7	2·8	3·5
Male illegitimate births—										
1930	21	302	159	1,291	1,335	274	333	281	129	4,125
1931	29	323	207	1,298	1,423	251	328	338	162	4,359
Female illegitimate births—										
1930	20	255	153	1,228	1,316	266	286	276	134	3,934
1931	42	307	160	1,152	1,350	262	310	297	126	4,006

Stillbirths.—Statistics of the number of children born dead in 1930 are shown below for Canada, according to the status and age of the mother; totals for 1931 are inserted. Stillbirths to unmarried mothers were 5·7 p.c. of total stillbirths in 1931.

12.—Stillbirths by Age of Mother and Legitimacy of Child in 1930, with Totals for 1931.

Age Group of Mother.	Born to Unmarried Mothers.	Born to Married Mothers.									Total Born in Canada.
		P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 15 years of age	2	–	–	–	–	–	–	–	–	–	2
15–19 years	120	1	36	23	72	131	21	28	26	8	466
20–24 years	107	6	66	75	443	512	107	105	119	56	1,596
25–29 years	44	11	75	62	572	585	88	113	117	65	1,732
30–34 years	19	4	69	72	453	594	91	109	91	57	1,559
35–39 years	17	8	62	61	442	460	85	93	87	47	1,362
40–44 years	11	5	36	28	241	207	49	68	55	21	721
45 and over	1	1	6	1	37	34	9	12	7	2	110
Unknown	112	3	–	–	5	34	1	1	1	2	159
Totals, 1930	**433**	**39**	**350**	**322**	**2,265**	**2,557**	**451**	**529**	**503**	**258**	**7,707**
Totals, 1931	**433**	**42**	**378**	**327**	**2,258**	**2,492**	**442**	**545**	**431**	**271**	**7,619**
Ratios to Total Births, 1930	5·1	2·2	3·1	3·1	5·7	3·6	3·1	2·4	2·9	2·4	3·1
Ratios to Total Births, 1931	4·9	2·3	3·3	3·0	2·7	3·6	3·1	2·6	2·5	2·6	3·1

Birth Rates in Various Countries.—The relative positions occupied by Canada and its individual provinces among the countries of the world with respect to crude birth rate (the annual number of births per 1,000 of population) are shown in Table **13**.

13.—Crude Birth Rates of Various Countries in Recent Years.

Country or Province.	Year.	Crude Birth Rate.	Country or Province.	Year.	Crude Birth Rate.
Costa Rica	1928	46·9	New South Wales	1930	21·0
Egypt	1929	43·7	Northern Ireland	1930	20·8
Russia	1928	41·0	Finland	1930	20·6
Chile	1930	39·8	Manitoba	1931	20·5
Ceylon	1930	39·0	Ontario	1931	20·2
Salvador	1928	38·0	Queensland	1930	20·1
Jamaica	1930	37·0	Australia	1930	19·9
Panama	1928	35·9	Irish Free State	1930	19·8
Roumania	1930	35·0	Latvia	1930	19·8
Japan	1930	32·4	Scotland	1930	19·5
Quebec	1931	29·1	United States (Reg. Area)	1930	18·9
Spain	1930	28·8	New Zealand	1930	18·8
Italy	1930	26·7	Belgium	1930	18·8
New Brunswick	1931	26·5	Denmark	1930	18·7
Union of South Africa (Whites)	1930	26·4	Victoria	1930	18·6
Uruguay	1930	24·4	France	1930	18·1
Newfoundland	1930	23·8	Prussia	1929	17·9
Alberta	1931	23·6	Germany	1930	17·5
Canada	**1931**	**23·2**	Estonia	1930	17·4
Saskatchewan	1931	23·1	South Australia	1930	17·2
Netherlands	1930	23·0	Switzerland	1930	17·2
Czechoslovakia	1930	22·7	Norway	1930	17·0
Nova Scotia	1931	22·6	Austria	1930	16·8
Tasmania	1930	22·1	England and Wales	1930	16·3
Western Australia	1930	22·0	Sweden	1930	15·4
Prince Edward Island	1931	21·4	British Columbia	1931	15·0

Section 3.—Marriages and Divorces.

Subsection 1.—Marriages.

About a century ago it was observed in the United Kingdom that the number of marriages tended to be high when the price of wheat was low and to be low when the price of wheat was high. This was quite naturally the case among a population, the majority of which was living at a comparatively low standard of comfort, and where the staple food was thus the chief factor in the cost of living.

More recently, the curve showing marriage rates in the United Kingdom and other English-speaking countries has ceased to bear any constant relation to the price of the staple food of the people, though it still does so in poorer countries. Its place in influencing the marriage rate has, however, been taken by the general level of prosperity. Marriages in such countries as the United Kingdom, the United States, Canada and Australia tend to increase in "good times" and to diminish in "hard times", when great numbers of those who are contemplating marriage are led to postpone such marriage until the advent of better industrial conditions. Thus marriages in Canada showed a considerable decline in 1931.

Summary statistics of marriages contracted in 1921-31 appear in Table **14.**

14.—Number of Marriages and Marriage Rates, by Provinces, 1921-31.

A.—NUMBER OF MARRIAGES.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
Average 1921–25..	473	3,186	2,953	[1]	24,037	4,634	4,982	4,313	3,971	[1]
Average 1926–30..	473	3,224	2,970	18,731	25,449	4,951	6,036	5,265	4,786	71,885
1926..............	459	2,861	2,938	17,827	23,632	4,537	5,483	4,503	4,418	66,658
1927..............	482	3,042	2,887	18,551	24,677	4,716	5,733	4,707	4,720	69,515
1928..............	466	3,256	3,146	19,126	25,728	5,170	6,701	5,776	4,942	74,311
1929..............	469	3,510	3,118	19,610	27,605	5,269	6,548	6,004	5,155	77,288
1930..............	488	3,451	2,761	18,543	25,605	5,061	5,717	5,334	4,697	71,657
1931..............	490	3,394	2,544	16,783	23,771	4,888	5,700	5,142	3,879	66,591

B.—MARRIAGE RATES PER 1,000 POPULATION.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
Average 1921–25..	5·4	6·1	7·6	[1]	8·0	7·5	6·4	7·3	7·1	[1]
Average 1926–30..	5·4	6·3	7·4	6·9	7·8	7·5	7·0	8·0	7·5	7·3
1926..............	5·3	5·6	7·4	6·8	7·5	7·1	6·7	7·4	7·3	7·1
1927..............	5·5	5·9	7·3	7·0	7·7	7·2	6·8	7·4	7·6	7·2
1928..............	5·3	6·3	7·8	7·0	7·8	7·8	7·8	8·8	7·7	7·6
1929..............	5·3	6·8	7·7	7·1	8·3	7·8	7·4	8·8	7·8	7·7
1930..............	5·5	6·7	6·8	6·6	7·6	7·3	6·3	7·5	6·9	7·0
1931..............	5·6	6·6	6·2	5·8	6·9	7·0	6·2	7·0	5·6	6·4

[1] Quebec was not included in the registration area prior to 1926.

Age at Marriage.—The average age of all bridegrooms in the Dominion in 1930 was 29·2 years and that of all brides 25·0 years. The average excess of the bridegroom's age was thus 4·2 years. It may be noted in Table **15** that when the contracting parties are grouped by age of bridegroom, the average difference in age is less for the younger groups, grooms under 20 being 0·3 years younger than the brides, while the excess of the average bridegroom's age was 1·5 years in the group 20-24, and steadily increased for each quinquennial age group until it was 11·2 years for the bridegrooms 50 years and over. On the other hand, when the parties are grouped by the age of the bride, it is found that there is no such regularity as is shown in the table by age of grooms. In the case of brides in the age group 25-29 years the bridegrooms approximate most closely to their own (the brides') ages. Since these tables are based upon all marriages contracted during the year, the figures given should not be understood to signify the average ages at first marriage.

15.—Differences in Ages of Bridegrooms and Brides, 1930.

Age Group of Bridegrooms.	Average Age of Bride-grooms.	Average Age of Brides.	Excess of Average Age of Bride-grooms.	Age Group of Brides.	Average Age of Brides.	Average Age of Bride-grooms.	Excess of Average Age of Bride-grooms.
All bridegrooms....	29·2	25·0	4·2	All brides..........	25·0	29·2	4·2
Under 20 years.....	19·1	19·4	−0·3	Under 20 years.....	18·5	24·5	6·0
20–24 years.........	22·8	21·3	1·5	20–24 years.........	22·3	26·4	4·1
25–29 years.........	27·3	23·5	3·8	25–29 years.........	27·1	30·0	2·9
30–34 years.........	32·1	25·9	6·2	30–34 years.........	32·1	35·3	3·2
35–39 years.........	37·2	29·0	8·2	35–39 years.........	37·3	41·1	3·8
40–44 years.........	42·3	32·6	9·7	40–44 years.........	42·3	46·2	3·9
45–49 years.........	47·3	37·3	10·0	45–49 years.........	47·2	51·4	4·2
50 years and over...	60·0	48·8	11·2	50 years and over..	58·8	62·0	3·2

Out of each 1,000 bridegrooms in 1930, 905 were bachelors, 85 widowers, 10 divorced men; out of each 1,000 brides 932 were spinsters, 59 widows, 9 divorced women. Nineteen twenty-eight was the first year in which as many as 1 p.c. of those marrying had previously been divorced. There is a fairly close resemblance between the figures of divorces granted, as shown in Table **19** of this chapter, and the number of divorced persons re-married, more particularly in the case of males. Thus 875 divorces were granted in 1930, while 759 divorced males and 668 divorced females married again. This of course does not mean that these were the same persons.

16.—Average Ages of Parties Contracting Marriages, by Provinces, 1930.

Province.	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.
Prince Edward Island	30·0	25·9	4·1
Nova Scotia	29·0	24·6	4·4
New Brunswick	28·8	24·3	4·5
Quebec	28·9	25·4	3·5
Ontario	29·0	25·1	3·9
Manitoba	29·7	24·7	5·0
Saskatchewan	29·4	23·8	5·6
Alberta	29·5	24·1	5·4
British Columbia	31·3	26·4	4·9
Canada	**29·2**	**25.0**	**4.2**

Nativity of Brides and Bridegrooms.—The majority of marriages contracted in the western provinces in past years have been between persons born outside Canada. This condition however is being gradually changed and, although in Manitoba, Saskatchewan, Alberta and British Columbia, the majority of the bridegrooms in the marriages contracted in 1930 were born outside of Canada, as a rule the percentages show a general reduction over the past few years. Canadian-born brides were in the majority, in 1930, in all the provinces except British Columbia, where Canadian-born and foreign-born brides were about equally divided. In the Maritime Provinces and Quebec, the Canadian-born brides and grooms showed a marked predominance, varying between 83 p.c. and 94 p.c., and in Ontario over 61 p.c. of grooms and 67 p.c. of brides were Canadian-born in 1930. Taking Canada as a whole, 64·5 p.c. of all grooms and 71·1 p.c. of all brides were born in Canada. Table **17** gives the number of marriages per 1,000 population in each province, as well as the percentage distribution of brides and grooms according to nativity.

17.—Nativity of Persons Married in the Registration Area, by Provinces, 1926-30.

NOTE.—For figures for 1921-25, see the 1929 Year Book, p. 166.

Province.	Year.	Marriages.		Percentage Distribution of Grooms and Brides, by Nativity.					
		Total.	Per 1,000 Population.	Born in Provinces of Residence.		Born in Other Provinces.		Born Elsewhere.	
				Grooms	Brides.	Grooms	Brides.	Grooms	Brides.
Prince Edward Island	1926	459	5·3	88·9	94·3	5·5	2·2	5·7	3·5
	1927	482	5·5	92·7	95·0	3·5	1·5	3·7	3·5
	1928	466	5·3	91·0	94·2	3·6	2·6	5·4	3·2
	1929	469	5·3	91·3	92·5	3·8	4·3	4·9	3·2
	1930	488	5·5	90·0	91·4	4·3	3·9	5·7	4·7
Nova Scotia	1926	2,861	5·6	79·0	85·3	4·9	3·1	16·2	11·6
	1927	3,042	5·9	79·5	84·5	4·6	3·7	15·9	11·8
	1928	3,256	6·3	79·0	83·9	4·6	3·0	16·4	13·1
	1929	3,510	6·8	77·9	83·6	5·2	3·7	16·9	12·7
	1930	3,451	6·7	78·3	82·9	5·9	4·5	15·9	12·6

17.—Nativity of Persons Married in the Registration Area, by Provinces, 1926-30—concluded.

Province.	Year.	Marriages.		Percentage Distribution of Grooms and Brides, by Nativity.					
				Born in Provinces of Residence.		Born in Other Provinces.		Born Elsewhere.	
		Total.	Per 1,000 Population.	Grooms	Brides.	Grooms	Brides.	Grooms	Brides.
New Brunswick	1926	2,938	7·4	72·1	75·6	9·0	8·0	18·9	16·4
	1927	2,887	7·3	72·3	75·5	8·5	8·2	19·3	16·2
	1928	3,146	7·8	69·4	74·8	9·2	7·3	21·4	17·9
	1929	3,118	7·7	72·8	76·2	9·3	8·9	17·9	14·9
	1930	2,761	6·8	76·7	82·0	9·9	8·2	13·4	9·7
Quebec	1926	17,827	6·8	81·9	84·4	3·9	3·4	14·1	12·2
	1927	18,551	7·0	81·1	84·3	4·2	3·3	14·7	12·4
	1928	19,126	7·0	80·8	83·8	4·1	3·5	15·1	12·7
	1929	19,610	7·1	80·1	82·6	3·7	3·4	16·3	14·0
	1930	18,543	6·6	79·2	82·5	4·2	3·7	16·6	13·8
Ontario	1926	23,632	7·5	60·4	64·3	7·3	6·6	32·3	29·1
	1927	24,677	7·7	59·6	63·5	6·9	6·2	33·4	30·3
	1928	25,728	7·8	57·0	61·3	7·2	6·7	35·8	32·0
	1929	27,605	8·3	54·9	60·2	7·4	7·3	37·7	32·5
	1930	25,605	7·6	54·3	60·1	7·5	7·3	38·2	32·6
Manitoba	1926	4,537	7·1	35·4	47·7	14·2	12·2	50·3	40·2
	1927	4,716	7·2	34·7	48·7	13·6	10·8	51·8	40·6
	1928	5,170	7·8	34·8	48·0	13·0	10·5	52·2	41·5
	1929	5,269	7·8	37·7	50·6	12·6	10·9	49·7	38·5
	1930	5,061	7·3	37·1	52·1	12·5	10·2	50·3	37·6
Saskatchewan	1926	5,483	6·7	15·1	31·0	28·8	24·6	56·1	44·4
	1927	5,733	6·8	17·0	32·5	27·6	23·3	55·4	44·2
	1928	6,701	7·8	17·8	34·8	26·4	20·1	55·8	45·1
	1929	6,548	7·4	20·6	38·5	24·9	19·4	54·5	42·1
	1930	5,717	6·3	22·4	42·6	24·9	18·7	52·6	38·7
Alberta	1926	4,503	7·4	13·3	25·7	24·1	21·7	62·5	52·6
	1927	4,707	7·4	15·2	25·4	23·3	20·9	61·4	53·7
	1928	5,776	8·8	16·6	28·3	22·4	18·7	61·0	53·0
	1929	6,004	8·8	17·6	30·9	20·9	17·2	61·4	51·9
	1930	5,334	7·5	19·0	32·6	20·6	18·3	60·4	49·0
British Columbia	1926	4,418	7·3	17·7	22·5	21·0	20·8	61·2	56·7
	1927	4,720	7·6	16·9	22·7	20·3	21·9	62·8	55·5
	1928	4,942	7·7	18·3	25·8	21·5	21·7	60·2	52·5
	1929	5,155	7·8	18·6	26·5	20·6	21·6	60·8	51·9
	1930	4,697	6·9	18·8	27·0	21·3	22·7	59·9	50·3
Canada (Exclusive of the Territories)	**1926**	**66,658**	**7·1**	**56·2**	**62·0**	**10·7**	**9·5**	**33·2**	**28·5**
	1927	**69,515**	**7·2**	**55·9**	**61·8**	**10·3**	**9·1**	**33·8**	**29·1**
	1928	**74,311**	**7·6**	**54·1**	**60·6**	**10·6**	**9·1**	**35·3**	**30·3**
	1929	**77,288**	**7·7**	**53·9**	**60·8**	**10·2**	**9·2**	**36·0**	**30·0**
	1930	**71,657**	**7·0**	**54·3**	**61·9**	**10·2**	**9·2**	**35·5**	**28·9**

Marriage Rates in Various Countries.—For comparative purposes, the crude marriage rates per 1,000 of population in various countries of the world and in the provinces of Canada are shown for the indicated years in Table **18**.

18.—Crude Marriage Rates of Various Countries in Recent Years.

Country or Province.	Year.	Crude Marriage Rate per 1,000 Population.	Country or Province.	Year.	Crude Marriage Rate per 1,000 Population.
Ukraine	1929	11·3	Alberta	1931	7·0
United States	1929	10·1	Manitoba	1931	7·0
Czechoslovakia	1930	9·3	New South Wales	1930	7·0
Chile	1930	9·2	Ontario	1931	6·9
Union of South Africa (Whites)	1930	9·2	Scotland	1930	6·9
Latvia	1930	9·2	Finland	1930	6·8
Roumania	1930	9·2	Australia	1930	6·7
Hungary	1930	9·0	Tasmania	1930	6·7
Belgium	1930	8·8	Nova Scotia	1931	6·6
Germany	1930	8·7	Queensland	1930	6·6
France	1930	8·4	Victoria	1930	6·5
Denmark	1930	8·2	**Canada**	**1931**	**6·4**
Estonia	1930	8·0	Norway	1930	6·4
England and Wales	1930	7·9	Uruguay	1930	6·3
Japan	1930	7·9	New Brunswick	1931	6·2
Netherlands	1930	7·9	Saskatchewan	1931	6·2
Switzerland	1930	7·9	Northern Ireland	1930	6·1
New Zealand	1930	7·8	Quebec	1931	5·8
Austria	1930	7·7	South Australia	1930	5·7
Western Australia	1930	7·7	British Columbia	1931	5·6
Spain	1930	7·6	Prince Edward Island	1931	5·6
Italy	1930	7·4	Ceylon	1930	5·1
Iceland	1930	7·1	Irish Free State	1930	4·6
Sweden	1930	7·1	Salvador	1928	3·3

Subsection 2.—Divorces.

For many years subsequent to Confederation the number of divorces granted in Canada was very small, 1883, with 13 divorces, being the first year in which the number attained two figures, while 1903, with 21 divorces, was the record year up to that time. Thereafter the numbers grew more rapidly, 1909 showing 51 divorces and 1913, the last pre-war year, 60 divorces. This number was, however, less than one per 1,000 of the marriages contracted in Canada in these years.

The effect of the war was to increase very greatly the number of divorces granted in Canada. The causes may be found in the generally unsettling psychological effect of the war period, and the long separations between men on active service and their wives. The provision of new facilities for divorce is also to be considered; owing to a decision of the British Privy Council, divorces in the Prairie Provinces have, subsequently to 1918, been granted by the courts of these provinces, so that Ontario and Quebec have since then been the only provinces in which the applicant for divorce must secure a special Private Act of Parliament. In 1930, however, an Act of the Dominion Parliament (20-21 Geo. V, c. 14) gave jurisdiction in divorce cases to the Supreme Court of Ontario.

The above-mentioned causes have tended to produce the recent increase in the numbers of divorces granted in Canada, which grew steadily from 114 in 1918 to 875 in 1930, these numbers being those of final decrees, which alone really constitute divorces. In 1931 the number decreased to 684, this being largely due to the transfer of jurisdiction in Ontario divorces from the Parliament of Canada to the Supreme Court of the province, with the consequent delay between the granting of the decree *nisi* and the decree absolute. In 1932 the number rose to 887, this figure being greater than the total divorces granted in the 48 years from 1868 to 1915. The statistics of divorces granted in the years from 1901 to 1932 inclusive will be found in Table **19.** (For divorces in each year prior to 1901 see the 1921 Year Book, p. 825.)

19.—Statistics of Divorces Granted in Canada, 1901-32.

NOTE.—In Prince Edward Island only two divorces have been granted since Confederation, one in 1913 and one in 1931. In consequence of a decision of the British Privy Council, divorces in Manitoba, Saskatchewan and Alberta have, subsequently to 1918, been granted by the courts of these provinces.

Year.	Granted by the Dominion Parliament.					Granted by the Courts.			Total for Canada.
	Ontario.	Quebec.	Northwest Territories.		Manitoba.	Nova Scotia.	New Brunswick.	British Columbia.	
1901	2	-	-		-	10	-	7	19
1902	2	-	-		-	9	1	3	15
1903	2	1	1		1	8	4	4	21
1904	5	1	-		-	6	2	5	19
1905	2	3	2		2	6	2	18	35
			Alta.	Sask.					
1906	10	3	1	-	-	5	1	17	37
1907	3	1	-	-	1	8[1]	3	9	25
1908	8	-	-	-	-	5	5	12	30
1909	8	4	1	1	2	8[1]	5	22	51
1910	14	2	-	1	3	13[1]	6	12	51
1911	13	4	2	-	3	10[1]	6	19	57
1912	9	3	2	1	1	4	4[2]	11	35
1913	20	4	4	1	6	-	4	20	60[6]
1914	18	7	4	2	2	10	12	15	70
1915	10	3	3	1	1	13	6	16	53
1916	18	1	1	2	2	14	11	18	67
1917	10	4	2	1	-	8	6	23	54
1918	10	2	2	1	-	24	10	65	114
1919	49	4	36[3]	3[4]	88[3]	36	13	147	376
1920	91	9	64[4]	26[4]	42[4]	45	15	136	429
1921	101	9	84[4]	50[4]	122[4]	41	13	128	548
1922	90	6	129[4]	37[4]	97[4]	35	12	138	544
1923	105	11	87[4]	41[4]	81[4]	22	19	139[3]	505
1924	114	13	118[4]	28[4]	77[5]	42	15	136[3]	543
1925	121	13	101[4]	42[4]	79[4]	30	15	150	551
1926	113	10	154[4]	48[3]	85[4]	19	12	167	608
1927	182	13	148[4]	60[4]	102[3]	29	17	197	748
1928	213	25	168[4]	55[4]	79[4]	28	14[3]	203	785
1929	208	30	147[4]	69[4]	89[4]	30	21	222	816
1930	207	40	151[4]	62[4]	114[4]	19	27	255	875
1931	82[4]	38	154[4]	51[4]	94[4]	36	20	208	684[6]
1932	233[7]	24	149[4]	61[4]	114[4]	35	26	245	887

[1] Includes one judicial separation. [2] Includes one not effective till court costs are paid. [3] One by Parliament, remainder by courts. [4] Granted by courts. [5] Two granted by Parliament, remainder by courts. [6] Includes one in P.E. Island. [7] Three by Parliament, remainder by courts.

Section 4.—Deaths.

Within the past century and more especially within the past generation there has occurred throughout the countries of the white world a notable decline in the death rate, except where man has brought death upon himself through wars and the aftermath of wars. How far this decline has been due to advances in medical science, how far to better sanitation and how far to the improvement in the general conditions of living, as a result of the increase in the productive power of humanity, is in dispute, but concerning the facts there is no doubt.

Perhaps the most impressive testimony regarding this decline in the death rate is furnished by the mortality statistics of Sweden, where vital statistics have been kept with great accuracy for the whole nation ever since 1750. There the crude death rate declined from an average of 27·4 per 1,000 in the decade 1751-60 to 14·3 in the decade 1911-20 and to 11·7 in 1930.

Similarly, in England, the crude death rate, which was 22·5 per 1,000 in the 60's, 21·4 in the 70's and 18·2 in the 90's of the last century, declined to 15·4 in the first decade of the present century and 12·1 in the third, rising to 12·3 in 1931. In Scotland, again, the average rate was 22·1 in the '60's, 21·8 in the '70's, 18·6 in the '90's, 13·9 in 1921-25, 13·6 in 1926-30, and 13·3 in 1931.

Of course the preceding statements are not to be taken to mean that every year will show a decline in the death rate as compared with the preceding year There will always be years of specially high mortality, for instance 1918, when the death rate in Ontario, the most populous of the provinces of Canada, was 15·3 per 1,000, owing to the influenza-pneumonia epidemic, as against 12·0 in 1917 and 11·9 in 1919. Over a period, however, these idiosyncrasies of individual years are reduced to negligibility, and it remains true that from decade to decade there is, under normal conditions, a decline in the crude death rates of the countries of the white man's world.

As for Canada, while the period elapsed since the introduction of complete and comprehensive vital statistics in 1920 has been too short to establish a definite downward trend, the rate of 12·4 per 1,000 for that year, in the eight provinces then included in the registration area, was substantially higher than in any subsequent year. From 1926 Quebec, which has a higher death rate than any other province, has been included in the registration area and its influence is reflected in the totals for Canada shown in Table **20**. A decided improvement is shown in the deaths and death rate of Quebec for the years 1930 and 1931, but the proportionate improvement in all the other provinces is also pronounced and in some cases even greater than that in Quebec.

Subsection 1.—General Mortality.

Total deaths and crude death rates in recent years are given in Table **20** for Canada, by provinces. There was a smaller absolute number of deaths in 1931 than in any other year since the record became available for all the nine provinces.

20.—Deaths and Death Rates, by Provinces, 1926-31, with Averages 1921-25 and 1926-30.

A.—TOTAL DEATHS.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[2]
Average 1921-25	1,085	6,519	5,093	[1]	34,252	5,348	5,859	4,953	4,812	[1]
Average 1926-30	969	6,362	5,019	36,645	36,650	5,507	6,256	5,530	5,986	108,924
1926	898	6,366	5,002	37,251	35,909	5,335	6,060	5,159	5,474	107,454
1927	913	6,378	4,902	36,175	34,775	5,309	6,031	5,059	5,750	105,292
1928	952	6,202	4,972	36,632	37,128	5,396	6,166	5,699	5,910	109,057
1929	1,122	6,660	5,230	37,221	38,123	5,808	6,715	6,239	6,397	113,515
1930	961	6,206	4,991	35,945	37,313	5,685	6,309	5,496	6,400	109,306
1931	912	5,968	4,644	34,487	35,705	5,319	6,066	5,302	6,114	104,517

B.—CRUDE DEATH RATES PER 1,000 POPULATION.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[2]
Average 1921-25	12·5	12·6	13·1	[1]	11·3	8·6	7·5	8·3	8·7	[1]
Average 1926-30	11·0	12·4	12·5	13·5	11·2	8·3	7·3	8·4	9·3	11·1
1926	10·3	12·4	12·6	14·3	11·3	8·3	7·4	8·5	9·0	11·4
1927	10·5	12·4	12·3	13·6	10·8	8·2	7·2	8·0	9·2	10·9
1928	10·8	12·0	12·4	13·5	11·3	8·1	7·2	8·7	9·2	11·1
1929	12·8	12·9	12·9	13·4	11·4	8·6	7·6	9·1	9·7	11·3
1930	10·9	12·1	12·3	12·7	11·0	8·3	7·0	7·8	9·5	10·7
1931	10·4	11·6	11·4	12·0	10·4	7·6	6·6	7·2	8·8	10·1

[1] Quebec was not included in the registration area prior to 1926. [2] Exclusive of the Territories.

Age Distribution of Decedents.—The numbers of males and females dying in the nine provinces in 1930 and 1931 are given by single years of age up to 5 and by quinquennial age groups from 5 to 90 years and over in Table **21,** together with the percentage of deaths occurring in each group in each of these years. In the eight provinces that have been in the registration area since 1921, the number of males under 1 year dying in 1931 was only 16·3 p.c. of the total number of male deaths, as against 23·6 p.c. in 1921, and of females, 14·8 p.c. as against 20·3 p.c. Similarly, deaths under 5 years of age among males fell from 29·8 p.c. of the total number of deaths in 1921 to 19·9 p.c. in 1931 and among females, from 26·5 p.c. number of deaths in 1921 to 19·9 p.c. in 1931 and among females, from 26·5 p.c. to 18·8 p.c.

21.—Distribution of Deaths in Canada by Sex and Certain Age Groups, Numbers and Percentages, 1930-31.

Age Group.	Males.		Females.		Males.		Females.	
	1930.	1931.	1930.	1931.	1930.	1931.	1930.	1931.
	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
Under 1 year	12,284	11,667	9,458	8,693	20·8	20·7	18·8	18·1
1 year	1,569	1,418	1,397	1,260	2·7	2·5	2·8	2·6
2 years	781	643	630	532	1·3	1·1	1·3	1·1
3 years	544	471	440	421	0·9	0·8	0·9	0·9
4 years	424	312	383	320	0·7	0·6	0·8	0·7
Totals, under 5 years	15,602	14,511	12,308	11,226	26·4	25·7	24·5	23·4
5–9 years	1,483	1,239	1,132	963	2·5	2·2	2·3	2·0
10–14 years	926	820	862	806	1·6	1·5	1·7	1·7
15–19 years	1,436	1,309	1,397	1,132	2·4	2·3	2·8	2·4
20–24 years	1,663	1,500	1,549	1,453	2·8	2·7	3·1	3·0
25–29 years	1,486	1,386	1,526	1,414	2·5	2·5	3·0	2·9
30–34 years	1,349	1,299	1,393	1,432	2·3	2·3	2·8	3·0
35–39 years	1,637	1,509	1,585	1,574	2·8	2·7	3·2	3·3
40–44 years	1,970	1,885	1,754	1,493	3·3	3·3	3·5	3·1
45–49 years	2,410	2,310	1,840	1,738	4·1	4·1	3·7	3·6
50–54 years	2,797	2,851	2,012	1,993	4·7	5·0	4·0	4·2
55–59 years	3,038	3,052	2,284	2,245	5·1	5·4	4·6	4·7
60–64 years	3,546	3,577	2,735	2,854	6·0	6·3	5·4	5·9
65–69 years	4,372	4,241	3,533	3,346	7·4	7·5	7·0	7·0
70–74 years	4,941	4,858	4,034	4,070	8·4	8·6	8·0	8·5
75–79 years	4,482	4,359	3,875	4,028	7·6	7·7	7·7	8·4
80–89 years	5,062	4,993	5,279	5,189	8·6	8·8	10·5	10·8
90 years and over	832	759	1,091	1,022	1·4	1·3	2·2	2·1
Stated ages	59,032	56,458	50,189	47,978	–	–	–	–
Ages not stated	77	71	8	10	–	–	–	–
Totals, All Ages	**59,109**	**56,529**	**50,197**	**47,988**	–	–	–	–

The quartile and decile ages of decedents for the years 1928-30 are given for each sex and for the two sexes combined in Table **22.** The fifth decile and second quartile (or the median) both mark the middle points of the arrays, and the deciles, dividing each half into five groups, give a more detailed picture of the age distribution in each half than do the quartiles. An examination of the arrays over the three-year period shows that both the quartile and decile distributions have been singularly free from irregularity. This was true in all three categories of males, females, and both sexes.

22.—Quartile and Decile Ages of Decedents, by Sex, 1928-30.

Position in Array by Age.		Both Sexes.			Males.			Females.		
		1928.	1929.	1930.	1928.	1929.	1930.	1928.	1929.	1930.
First quartile	years of age	4·67	4·45	4·25	3·34	3·15	3·23	6·82	6·30	5·79
Second quartile	"	49·01	48·99	49·23	48·92	48·86	49·13	49·12	49·17	49·37
Third quartile	"	71·32	71·25	71·25	70·52	70·47	70·53	72·29	72·22	72·22
First decile	months of age	1·27	1·43	1·31	0·94	1·03	1·10	1·77	1·96	1·60
Second decile	years of age	1·19	1·29	1·03	0·89	0·94	0·85	1·66	1·75	1·41
Third decile	"	16·07	15·42	15·95	13·31	12·52	13·40	18·45	18·03	17·96
Fourth decile	"	34·30	33·85	34·21	33·80	33·21	33·70	34·75	34·41	34·66
Fifth decile	"	49·01	48·99	49·24	48·92	48·86	49·13	49·12	49·17	49·37
Sixth decile	"	60·13	60·20	60·07	59·60	59·48	59·38	60·70	61·12	60·88
Seventh decile	"	68·06	68·19	68·10	67·31	67·37	67·33	68·90	69·07	68·94
Eighth decile	"	74·48	74·39	74·33	73·64	73·61	73·57	75·44	75·28	75·24
Ninth decile	"	81·00	80·91	80·82	80·00	80·19	79·99	82·20	81·89	81·93

Adjusted Death Rates.—While the crude death rate gives the actual mortality per 1,000 of population, the differing age constitution of the population in different communities and the high mortality among infants and elderly people make the crude death rate no true test of the relative expectation of life in such communities. Where the age and health constitution of a particular group is particularly favourable to low mortality, for example among the selected lives of soldiers in peace time, the crude and the adjusted death rates will be lower than elsewhere.

When comparisons of the rates of mortality in several communities are made by age groups the effects of differences in age constitution between these communities are eliminated, but by a rather cumbrous process which does not bring together and express as a single figure the facts of the situation. It has therefore been considered desirable to adopt a particular community as a standard, and to find what the death rates of other communities would have been if the age and sex constitution of their population had corresponded to those of the community taken as a standard. The "standard" population chosen for this purpose in England and Wales and the United States is the "standard million", based on the age and sex distribution per million of the population of England and Wales at the census of 1901. That age and sex distribution was as follows:—

Age Group.	Both Sexes.	Males.	Females.
All ages	1,000,000	483,543	516,457
Under 5 years	114,262	57,039	57,223
5– 9 years	107,209	53,462	53,747
10–14 years	102,735	51,370	51,365
15–19 years	99,796	49,420	50,376
20–24 years	95,946	45,273	50,673
25–34 years	161,579	76,425	85,154
35–44 years	122,849	59,394	63,455
45–54 years	89,222	42,924	46,298
55–64 years	59,741	27,913	31,828
65–74 years	33,080	14,691	18,389
75 years and over	13,581	5,632	7,949

Regarding the standard million of England and Wales the Registrar General says: "As the population of this country in 1901 included relatively few infants and old people it forms a standard exceptionally favourable to low mortality". The relative fewness of old people in the population is presumably due to the great increase in English population during the 19th century; the relative fewness of infants, to the marked reduction of the birth rate between the 1870's and the end of the century.

The process above described has been applied to the population of the eight provinces, the former registration area of Canada, for the years 1921-31 and to the population of Quebec for the years 1926-31 in Table **23.** Of the rates there given, those for 1921 and 1922 have been calculated directly, the proportion of the population in each sex and age group according to the census of 1921 being assumed to hold true for 1922 also; similarly the rates for 1930 and 1931 have been calculated directly from the proportions shown in each sex and age group at the census of 1931. For the intervening years 1923-29, for which estimates of total population but not of population by age groups were available, the following method was adopted. The proportions which the adjusted rates of 1921 and 1922 (correct to three decimal places) bore to the crude were averaged, similarly those of 1930 and 1931, and the change was assumed to have taken place in an arithmetical progression during the intervening seven years. Quebec not having been in the registration area in the year 1921, an adjusted rate was not available for that year or for 1922, but an adjusted rate for 1926 was calculated on the assumption that the sex and age distribution of 1921 remained unchanged. As the proportion of the adjusted rate to the crude depends primarily on this sex and age distribution, the proportion thus obtained for Quebec in 1926 was used instead of the missing averages for 1921 and 1922. The same course was followed for the total of the nine provinces.

In all of the eight provinces for which 1921 figures are given the proportion of the adjusted rate to the crude was higher in 1921 than in 1931; in other words, the age distribution had become more unfavourable in the later year. In the Maritime Provinces and Ontario the process of "standardizing" or "adjusting" the death rate results in a reduced rate. This is particularly true of Prince Edward Island, which has the largest proportion of aged persons of all Canadian provinces. In the western provinces, on the other hand, the adjusted rates are higher than the crude. So much is this so, that in the case of Saskatchewan, while the crude rate in 1931 was only 6·6, as compared with 10·4 in Prince Edward Island, the adjusted rate was actually slightly higher than that of the island province.

23.—Crude and Adjusted Death Rates in Canada, by Provinces, 1921-31.

Province.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
P.E. Island—											
Crude	13·6	12·5	13·2	11·1	11·6	10·3	10·5	10·8	12·8	10·9	10·4
Adjusted	10·3	9·3	9·9	8·2	8·6	7·6	7·7	7·9	9·2	7·9	7·4
Nova Scotia—											
Crude	12·3	12·8	13·3	12·8	11·7	12·4	12·4	12·0	12·9	12·0	11·6
Adjusted	10·3	10·6	11·0	10·5	9·6	10·1	10·1	9·7	10·4	9·7	9·3

23.—Crude and Adjusted Death Rates in Canada, by Provinces, 1921-31—concluded.

Province.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
New Brunswick—											
Crude	14·2	13·3	12·9	12·6	12·6	12·6	12·3	12·4	12·9	12·3	11·4
Adjusted	12·4	11·8	11·3	11·0	11·0	11·0	10·7	10·8	11·2	10·7	9·8
Ontario—											
Crude	11·8	11·4	11·8	10·8	10·9	11·3	10·8	11·3	11·4	11·0	10·4
Adjusted	10·8	10·4	10·7	9·7	9·8	10·0	9·5	9·9	9·9	9·5	8·9
Manitoba—											
Crude	8·8	9·3	8·6	8·0	8·3	8·3	8·2	8·1	8·6	8·3	7·6
Adjusted	9·6	10·3	9·4	8·7	9·0	9·0	8·7	8·6	9·0	8·6	7·9
Saskatchewan—											
Crude	7·4	8·0	7·9	7·3	7·0	7·4	7·2	7·2	7·6	7·0	6·6
Adjusted	8·3	9·1	9·0	8·3	8·0	8·5	8·2	8·1	8·6	7·8	7·5
Alberta—											
Crude	8·4	8·9	8·4	8·1	7·8	8·5	8·0	8·7	9·1	7·8	7·2
Adjusted	9·4	10·3	9·6	9·3	8·9	9·7	9·1	9·7	10·2	8·5	8·0
British Columbia—											
Crude	8·0	9·1	9·0	8·8	8·4	9·0	9·2	9·2	9·7	9·5	8·8
Adjusted	8·4	9·6	9·4	9·0	8·5	8·9	9·0	8·8	9·1	8·7	8·1
Canada (Former Registration Area)—											
Crude	**10·6**	**10·6**	**10·7**	**10·0**	**9·9**	**10·3**	**9·9**	**10·2**	**10·5**	**10·0**	**9·4**
Adjusted	**10·2**	**10·3**	**10·3**	**9·5**	**9·4**	**9·7**	**9·3**	**9·5**	**9·8**	**9·2**	**8·6**
Quebec—											
Crude	[1]	[1]	[1]	[1]	[1]	**14·3**	**13·6**	**13·5**	**13·4**	**12·7**	**12·0**
Adjusted	[1]	[1]	[1]	[1]	[1]	**14·0**	**13·3**	**13·2**	**13·1**	**12·4**	**11·7**
Canada (Exclusive of the Territories)—											
Crude	[1]	[1]	[1]	[1]	[1]	**11·4**	**10·9**	**11·1**	**11·3**	**10·7**	**10·1**
Adjusted	[1]	[1]	[1]	[1]	[1]	**10·9**	**10·5**	**10·6**	**10·8**	**10·1**	**9·5**

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[1] Quebec was not included in the registration area prior to 1926.

Causes of Death.—More than 85 p.c. of deaths recorded in the present registration area in the years 1929 to 1931 were due to the 32 causes specified in Tables 24 and 25.

Total deaths in 1931 were the lowest they have been since statistics for the whole of Canada were made possible by Quebec coming into the registration area in 1926. The influenza epidemic of 1929 accounted for an increase in the total, but the deaths from this cause were below normal in 1931. It is significant, however, that cancer and diseases of the heart are increasingly important causes of death in spite of all efforts to control these diseases. Suicides did not vary much in 1931 from the high level reached in 1930, but violent deaths apart from suicides show improvement.

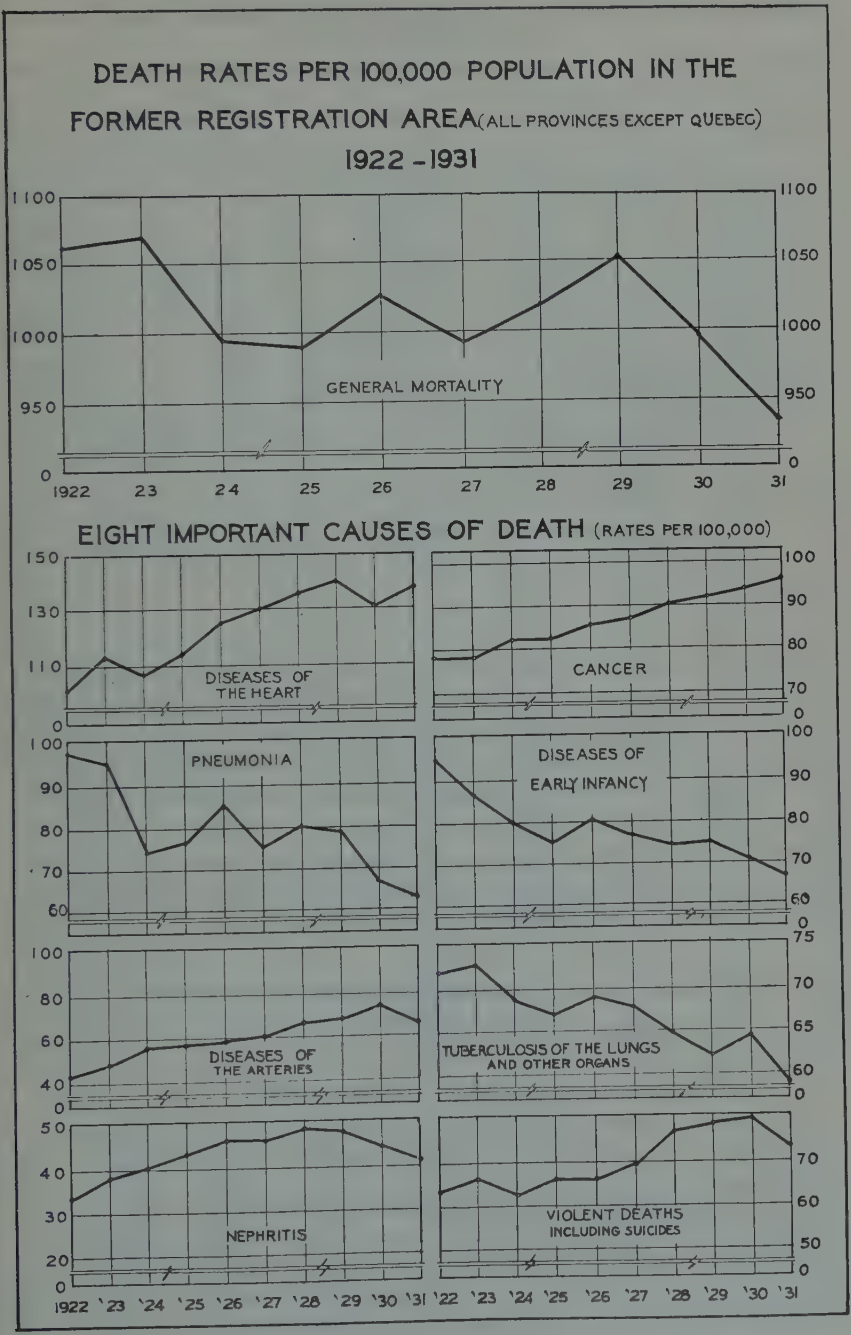
24.—Deaths in Canada, by Principal Causes, 1926-31.

Int. List No.[1]	Cause of Death.	1926.	1927.	1928.	1929.	1930.	1931.
1, 2	Typhoid fever	465	1,112	467	467	451	421
7	Measles	892	616	337	619	521	167
8	Scarlet fever	363	411	346	440	397	253
9	Whooping cough	1,242	1,030	727	755	964	748
10	Diphtheria	913	1,012	916	980	737	646
11	Influenza	5,174	3,451	4,703	7,170	2,472	3,217
16	Poliomyelitis and polioencephalitis (acute)	93	193	182	152	215	223
17	Epidemic or lethargic encephalitis	99	120	120	118	88	77
18	Epidemic or cerebro-spinal meningitis	207	219	235	341	294	225
23	Tuberculosis, respiratory system	6,485	6,444	6,490	6,443	6,581	6,204
24–32	Tuberculosis, other organs	1,444	1,338	1,370	1,329	1,494	1,412
45–53	Cancer	7,614	7,919	8,514	8,792	9,273	9,578
59	Diabetes mellitus	1,046	1,083	1,097	1,208	1,146	1,244
71	Anæmia	1,040	793	732	693	740	716
82 a, b, c	Cerebral hæmorrhage, embolism or thrombosis	3,033	2,938	3,094	2,986	2,827	2,594
82d	Paralysis without specified cause	1,124	1,108	1,011	984	907	728
86	Convulsions (under 5 years of age)	571	553	440	429	380	368
90–95	Diseases of the heart	11,415	11,775	12,630	13,205	13,067	13,734
96, 97, 99, 102	Diseases of the arteries	4,981	5,110	5,644	5,940	6,560	6,094
106	Bronchitis	587	505	522	471	443	469
107–109	Pneumonia	8,427	7,562	8,425	8,441	7,338	7,011
119–120	Diarrhœa and enteritis	5,445	5,534	5,032	4,910	6,013	5,158
121	Appendicitis	1,321	1,382	1,405	1,451	1,488	1,394
122	Hernia, intestinal obstruction	889	910	856	962	963	987
130–132	Nephritis	5,138	5,235	5,715	5,687	5,570	5,168
137	Diseases of the prostate	734	638	785	739	801	746
140–150	Puerperal causes	1,317	1,300	1,331	1,341	1,405	1,215
157	Congenital malformations	1,550	1,347	1,441	1,466	1,475	1,427
158–161	Diseases of early infancy	9,902	9,246	9,215	9,144	8,974	9,019
162	Senility (old age)	2,764	2,470	2,408	2,505	2,334	2,225
163–171	Suicides	680	759	751	835	1,010	1,004
173–198	Violent deaths (suicides excepted)	5,189	5,509	6,174	6,316	6,468	6,168
	Other specified causes	14,053	14,599	14,791	15,020	14,919	12,777
	Totals, specified causes	106,197	104,221	107,906	112,339	108,315	103,417
199, 200	Ill-defined diseases	1,257	1,071	1,151	1,176	991	1,100
	Totals	**107,454**	**105,292**	**109,057**	**113,515**	**109,306**	**104,517**

[1] The numbers given in this column refer to the International List of Causes of Death, as revised in 1929 by the International Commission on the Classification of Diseases and Causes of Death. This classification, in its detailed, intermediate or abridged form, is accepted in almost all civilized countries.

25.—Death Rates per 100,000 Population in Canada, by Principal Causes, 1926-31.

Int. List No.[1]	Cause of Death.	1926.	1927.	1928.	1929.	1930.	1931.
1, 2	Typhoid fever	5	12	5	5	4	4
7	Measles	10	6	3	6	5	2
8	Scarlet fever	4	4	4	4	4	2
9	Whooping cough	13	11	7	8	9	7
10	Diphtheria	10	11	9	10	7	6
11	Influenza	55	36	48	72	24	31
16	Poliomyelitis and polioencephalitis (acute)	1	2	2	2	2	2
17	Epidemic or lethargic encephalitis	1	1	1	1	1	1
18	Epidemic or cerebro-spinal meningitis	2	2	2	3	3	2
23	Tuberculosis, respiratory system	69	67	66	64	65	60
24–32	Tuberculosis, other organs	15	14	14	13	15	14
45–53	Cancer	81	82	87	88	91	92
59	Diabetes mellitus	11	11	11	12	11	12
71	Anæmia	11	8	7	7	7	7
82 a, b, c	Cerebral hæmorrhage, embolism or thrombosis	32	31	32	30	28	25
82d	Paralysis without specified cause	12	12	10	10	9	7



DEATH RATES PER 100,000 POPULATION IN THE FORMER REGISTRATION AREA (ALL PROVINCES EXCEPT QUEBEC) 1922-1931

EIGHT IMPORTANT CAUSES OF DEATH (RATES PER 100,000)

25.—Death Rates per 100,000 Population in Canada, by Principal Causes, 1926-31—concluded.

Int. List No.[1]	Cause of Death.	1926.	1927.	1928.	1929.	1930.	1931.
86	Convulsions (under 5 years of age)	6	6	4	4	4	4
90–95	Diseases of the heart	122	122	129	132	128	133
96, 97 99, 102	Diseases of the arteries	53	53	57	59	64	59
106	Bronchitis	6	5	5	5	4	5
107–109	Pneumonia	90	79	86	84	72	68
119, 120	Diarrhœa and enteritis	58	58	51	49	59	50
121	Appendicitis	14	14	14	14	15	13
122	Hernia, intestinal obstruction	9	9	9	10	9	10
130–132	Nephritis	55	54	58	57	55	50
137	Diseases of the prostate	8	7	8	7	8	7
140–150	Puerperal causes	14	14	14	13	14	12
157	Congenital malformations	17	14	15	15	14	14
158–161	Diseases of early infancy	106	96	94	91	88	87
162	Senility (old age)	29	26	25	25	23	21
163–171	Suicides	7	8	8	8	10	10
173–198	Violent deaths (suicides excepted)	55	57	63	63	63	60
	Other specified causes	149	152	151	150	146	123
	Totals, specified causes	1,132	1,083	1,099	1,122	1,062	998
199, 200	Ill-defined diseases	13	11	12	12	10	11
	Totals, Death Rates per 100,000 Population	**1,146**	**1,094**	**1,110**	**1,133**	**1,072**	**1,009**

[1] See footnote 1, Table 24.

Deaths in Canadian Cities.—Table 26 gives the number of deaths in Canadian cities and towns of 10,000 population and over in each of the years from 1927 to 1931. Generally speaking, 1929 was a year of high death rates, the total number of deaths reported for the Dominion being 113,515 as compared with 105,136 in 1927. The 1929 figures for most cities show a corresponding increase in the number of deaths. It is probable that these cities contained a larger proportion of the total population in 1929 than in 1927 and it is quite likely that the number of non-residents dying in the hospitals of the cities is also on the increase. Deaths for 1930 and 1931 showed a decrease in most cities from the high levels of 1929.

26.—Total Deaths (Exclusive of Stillbirths) in Cities and Towns of 10,000 Population and Over, 1927-31.

City or Town.	1927.	1928.	1929.	1930.	1931.
Belleville, Ont	227	239	241	242	230
Brandon, Man	230	242	279	243	240
Brantford, Ont	347	403	405	395	380
Calgary, Alta	615	814	874	781	695
Charlottetown, P.E.I	202	278	310	283	257
Chatham, Ont	314	306	315	320	313
Chicoutimi, Que	282	219	210	174	187
Cornwall, Ont	236	272	228	225	230
East Windsor, Ont	73	67	76	58	56
Edmonton, Alta	789	861	988	876	797
Fort William, Ont	179	211	244	208	216
Galt, Ont	180	181	167	189	148
Glace Bay, N.S	344	256	289	308	263

26.—Total Deaths (Exclusive of Stillbirths) in Cities and Towns of 10,000 Population and Over, 1927-31—concluded.

City or Town.	1927.	1928.	1929.	1930.	1931.
Granby, Que	109	112	142	109	142
Guelph, Ont	224	241	245	233	234
Halifax, N.S	876	837	987	863	875
Hamilton, Ont	1,353	1,471	1,612	1,506	1,532
Hull, Que	382	369	327	331	399
Joliette, Que	165	170	187	181	192
Kingston, Ont	428	445	536	512	449
Kitchener, Ont	296	293	294	348	318
Lachine, Que	205	240	200	196	198
Lethbridge, Alta	140	199	217	199	166
Lévis, Que	201	227	215	218	255
London, Ont	1,058	1,122	1,126	1,080	960
Medicine Hat, Alta	104	170	162	148	149
Moncton, N.B	243	276	243	273	214
Montreal, Que	11,034	11,936	11,452	10,979	10,554
Moose Jaw, Sask	228	235	230	218	210
New Westminster, B.C	248	297	291	282	291
Niagara Falls, Ont	188	220	266	209	212
North Bay, Ont	133	129	166	180	139
Oshawa, Ont	238	227	214	234	207
Ottawa, Ont	1,536	1,645	1,773	1,747	1,709
Outremont, Que	74	84	128	135	130
Owen Sound, Ont	147	172	176	157	177
Peterborough, Ont	307	305	347	304	323
Port Arthur, Ont	221	222	233	241	213
Quebec, Que	2,091	2,313	2,251	2,481	2,135
Regina, Sask	402	520	555	507	455
St. Boniface, Man	495	465	529	502	424
St. Catharines, Ont	272	331	345	322	276
St. Hyacinthe, Que	260	281	332	325	295
St. Jean, Que	119	128	112	116	127
Saint John, N.B	671	710	786	685	688
St. Thomas, Ont	222	214	243	228	204
Sandwich, Ont	69	81	71	76	58
Sarnia, Ont	215	216	233	238	223
Saskatoon, Sask	496	498	499	499	432
Sault Ste. Marie, Ont	203	228	209	230	222
Shawinigan Falls, Que	185	218	212	191	177
Sherbrooke, Que	411	467	481	442	450
Sorel, Que	164	164	173	181	156
Stratford, Ont	194	199	203	208	196
Sudbury, Ont	167	200	247	296	253
Sydney, N.S	272	245	186	224	186
Thetford Mines, Que	136	163	194	166	128
Three Rivers, Que	539	556	592	542	630
Timmins, Ont	121	178	138	126	182
Toronto, Ont	6,263	6,962	7,100	7,057	6,745
Valleyfield, Que	214	178	152	168	151
Vancouver, B.C[1]	2,108	2,201	2,310	2,281	2,300
Verdun, Que	361	441	425	424	449
Victoria, B.C	482	558	590	607	526
Walkerville, Ont	48	146	211	203	191
Welland, Ont	167	155	159	165	151
Westmount, Que	71	128	152	261	212
Windsor, Ont	705	689	689	612	551
Winnipeg, Man	1,656	1,808	1,814	1,807	1,706
Woodstock, Ont	167	173	193	162	159

[1] Though Point Grey and South Vancouver were not incorporated into Vancouver until Jan. 1, 1929, their statistics are included in the figures for Vancouver for the years 1927-28.

Comparative Crude Death Rates of Different Countries.—In Table 27 will be found a comparative statement of the crude death rates of various countries and provinces for the latest available year. It is worthy of note that three Canadian provinces show the lowest death rates in the list and that Canada has a lower death rate than most other leading countries. The low death rates in the Prairie Provinces are in all three cases due in part to a favourable age distribution of population.

27.—Crude Death Rates of Various Countries in Recent Years.

Country or Province.	Year.	Crude Death Rate.	Country or Province.	Year.	Crude Death Rate.
Saskatchewan	1931	6·6	Sweden	1930	11·7
Alberta	1931	7·2	Panama	1930	11·7
Manitoba	1931	7·6	Quebec	1931	12·0
Queensland	1930	7·9	Prussia	1929	12·6
South Australia	1930	8·4	Belgium	1930	13·2
New South Wales	1930	8·5	Finland	1930	13·2
Australia	1930	8·6	Scotland	1930	13·3
New Zealand	1930	8·6	Newfoundland	1930	13·4
British Columbia	1931	8·8	Austria	1930	13·5
Victoria	1930	8·9	Northern Ireland	1930	13·8
Tasmania	1930	9·0	Italy	1930	14·1
Western Australia	1930	9·0	Czechoslovakia	1930	14·2
Netherlands	1930	9·1	Irish Free State	1930	14·2
Union of South Africa (whites)	1930	9·7	Latvia	1930	14·2
Canada	**1931**	**10·1**	Estonia	1930	14·9
Ontario	1931	10·4	Hungary	1930	15·5
Prince Edward Island	1931	10·4	France	1930	15·7
Norway	1930	10·5	Bulgaria	1930	15·8
Uruguay	1930	10·7	Greece	1930	16·4
Denmark	1930	10·8	Jamaica	1930	17·0
Germany	1930	11·1	Spain	1930	17·2
United States (Reg. Area)	1930	11·3	Japan	1930	18·2
England and Wales	1930	11·4	Roumania	1930	19·4
New Brunswick	1931	11·4	Chile	1930	24·7
Iceland	1930	11·6	Ceylon	1930	25·4
Nova Scotia	1931	11·6	British India	1929	26·0
Switzerland	1930	11·6	Egypt	1929	27·3

Subsection 2.—Infantile and Maternal Mortality.

In recent years a great part of the energy devoted by the medical profession and sanitarians to effect a decline in the death rate has gone to reduce infantile mortality, and in this field a large measure of success has been attained. In Canada, the Dominion, provincial and municipal health authorities have all taken part in the struggle to reduce infantile mortality, and usually, in the absence of epidemics, each year is showing an improvement. In the ten years for which the figures are available there is evident a very considerable decline in infantile mortality. In 1921 the infant death rate for Canada (using figures from provincial sources for Quebec) was 102 per 1,000 living births. This rate has been reduced to 84·7 in 1931. Table 28 gives figures for the whole of Canada for the years 1926 to 1931 and averages for the five-year periods 1921-25 and 1926-30. As in the case of general mortality, the infant mortality in Quebec exceeds that in any other province, although a study of the rates shows that steady improvement has been made in the six-year period during which the province has been included in the registration area. In Canada as a whole, over 4,000 infant lives were saved in 1931 which would have been snuffed out in 1926.

28.—Infantile Mortality, by Provinces, together with the Rate per 1,000 Living Births, 1926-31 with Averages for 1921-25 and 1926-30.

A.—INFANT DEATHS.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[2]
Average 1921-25	151	1,139	1,165	[1]	5,916	1,394	1,789	1,327	621	[1]
Average 1926-30	122	934	1,039	10,518	5,091	1,031	1,559	1,195	571	22,060
1926	123	882	1,095	11,666	5,302	1,122	1,681	1,233	588	23,692
1927	113	1,028	1,006	10,739	4,812	1,021	1,575	1,110	606	22,010
1928	92	865	960	10,332	4,880	972	1,370	1,200	524	21,195
1929	150	960	1,090	9,810	5,203	1,005	1,571	1,310	575	21,674
1930	132	937	1,048	10,045	5,260	1,035	1,601	1,122	562	21,742
1931	128	914	944	9,443	4,833	924	1,463	1,197	514	20,360

B.—INFANT DEATH RATES PER 1,000 LIVING BIRTHS.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[2]
Average 1921-25	76·8	93·7	105·0	[1]	82·7	83·7	83·0	85·8	60·6	[1]
Average 1926-30	70·6	84·8	100·7	127·1	74·1	71·6	73·3	75·5	55·2	93·3
1926	70·2	80·3	105·9	142·0	78·4	76·5	81·1	85·3	58·4	101·8
1927	66·6	92·3	96·0	129·3	71·1	72·2	74·9	74·5	60·1	94·0
1928	50·9	79·1	95·6	123·6	71·2	67·0	64·4	76·5	50·5	89·5
1929	89·8	89·8	106·5	120·5	76·0	70·6	73·3	77·4	55·4	92·1
1930	75·5	82·6	99·5	120·1	73·8	71·8	72·6	63·6	51·7	89·3
1931	68·1	78·7	87·4	112·9	69·8	64·3	68·6	69·4	49·4	84·7

[1] Quebec was not included in the registration area prior to 1926.
[2] Exclusive of the Territories.

Infantile Mortality by Causes of Death.—Twenty-one principal causes of death accounted in the years 1926 to 1931 for between 91 and 93 p.c. of the infantile mortality experienced in the Dominion, as is shown in Table **29**. It is noteworthy that four causes present at birth, *viz.*, premature birth, injuries at birth, congenital debility and congenital malformations, accounted for over 43 p.c. of the infant deaths of 1931. In the year 1930, 47 p.c. of all infants dying were less than one month old and 34 p.c less than one week old, as is shown in Table **30**.

29.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1929-31.

NOTE.—Figures for the former registration area for the years 1921 to 1924 will be found at pp. 182-3 of the 1927-28 Year Book and for 1925 to 1927 at pp. 177-8 of the 1929 Year Book. Figures for the whole of Canada for the years 1927 and 1928 will be found at pp. 138–40 of the 1932 Year Book.

Cause of Death.	International List No.	Year.	Numbers.			Rates per 100,000.			Per cent Distribution by Cause of Death.
			Males.	Females.	Both.	Males.	Females.	Boths.	
Measles	7	1926	141	122	263	118	108	113	1·1
		1929	88	84	172	73	73	73	0·8
		1930	119	93	212	95	78	87	1·0
		1931	29	27	56	23	23	23	0·3
Scarlet fever	8	1926	13	12	25	11	11	11	0·1
		1929	10	10	20	8	9	8	0·1
		1930	17	13	30	14	11	12	0·1
		1931	7	7	14	6	6	6	0·1
Whooping cough	9	1926	358	415	773	299	368	332	3·3
		1929	231	223	454	191	195	193	2·1
		1930	345	341	686	276	287	282	3·2
		1931	243	259	502	197	222	209	2·5
Diphtheria	10	1926	24	23	47	20	20	20	0·2
		1929	22	21	43	18	18	18	0·2
		1930	29	20	49	23	17	20	0·2
		1931	30	24	54	24	21	22	0·3
Influenza	11	1926	576	374	950	481	331	408	4·0
		1929	686	543	1,229	567	474	522	5·7
		1930	284	186	470	227	157	193	2·2
		1931	372	319	691	301	273	287	3·4
Erysipelas	15	1926	51	50	101	43	44	43	0·4
		1929	55	45	100	45	39	42	0·5
		1930	49	34	83	39	29	34	0·4
		1931	35	28	63	28	24	26	0·3

29.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1929-31—concluded

Cause of Death.	International List No.	Year.	Numbers.			Rates per 100,000.			Per cent Distribution by Cause of Death.
			Males.	Females.	Both.	Males.	Females.	Both.	
Poliomyelitis and polioencephalitis (acute)...	16	1926	6	3	9	5	3	4	0·3
		1929	9	6	15	7	5	6	0·1
		1930	13	9	22	10	8	9	0·1
		1931	7	13	20	6	11	8	0·1
Epidemic cerebro-spinal meningitis............	18	1926	33	24	57	28	21	24	0·2
		1929	39	25	64	32	22	27	0·3
		1930	34	27	61	27	23	25	0·3
		1931	32	30	62	26	26	26	0·3
Tuberculosis...........	23-32	1926	131	102	233	109	90	100	1·0
		1929	116	86	202	96	75	86	0·9
		1930	116	111	227	93	94	93	1·0
		1931	111	84	195	90	72	81	1·0
Syphilis................	34	1926	68	60	128	57	53	55	0·5
		1929	72	77	149	60	67	63	0·7
		1930	113	91	204	91	77	84	0·9
		1931	93	80	173	75	68	72	0·8
Convulsions............	86	1926	263	177	440	219	157	189	1·9
		1929	181	135	316	150	118	134	1·5
		1930	164	127	291	131	107	120	1·3
		1931	164	117	281	133	100	117	1·4
Bronchitis.............	106	1926	90	60	150	75	53	64	0·6
		1929	79	58	137	65	51	58	0·6
		1930	73	46	119	58	39	49	0·5
		1931	66	38	104	53	33	43	0·5
Pneumonia.............	107-109	1926	1,410	1,077	2,487	1,176	954	1,069	10·5
		1929	1,368	1,026	2,394	1,132	896	1,017	11·0
		1930	1,317	949	2,266	1,055	800	931	10·4
		1931	1,243	921	2,164	1,005	788	900	10·6
Diseases of the stomach	116-118	1926	156	126	282	130	112	121	1·2
		1929	131	114	245	108	100	104	1·1
		1930	107	92	199	86	78	82	0·9
		1931	99	52	151	80	45	63	0·7
Diarrhœa and enteritis.	119	1926	2,451	1,867	4,318	2,045	1,654	1,855	18·2
		1929	2,126	1,583	3,709	1,759	1,382	1,576	17·1
		1930	2,585	1,944	4,529	2,070	1,639	1,860	20·8
		1931	2,356	1,648	4,004	1,906	1,410	1,665	19·7
Hernia, intestinal obstruction.............	122	1926	68	39	107	57	35	46	0·5
		1929	66	43	109	55	38	46	0·5
		1930	67	36	103	54	30	42	0·5
		1931	42	27	69	34	23	29	0·3
Congenital malformations.................	157	1926	777	635	1,412	648	563	607	6·0
		1929	762	562	1,324	630	491	562	6·1
		1930	736	608	1,344	589	512	552	6·2
		1931	737	580	1,317	596	496	548	6·5
Congenital debility.....	158	1926	1,353	1,000	2,353	1,129	886	1,011	9·9
		1929	1,333	989	2,322	1,103	864	986	10·7
		1930	1,195	909	2,104	957	766	864	9·7
		1931	1,059	840	1,899	857	719	790	9·3
Premature birth........	159	1926	2,936	2,147	5,083	2,449	1,902	2,184	21·5
		1929	2,545	1,938	4,483	2,105	1,692	1,904	20·7
		1930	2,515	2,001	4,516	2,014	1,687	1,855	20·8
		1931	2,463	1,862	4,325	1,992	1,593	1,799	21·2
Injury at birth..........	160	1926	563	386	949	470	342	408	4·0
		1929	617	381	998	510	333	424	4·6
		1930	723	504	1,227	579	425	504	5·6
		1931	792	442	1,234	641	378	513	6·1
Other diseases peculiar to early infancy.......	161	1926	885	622	1,507	738	551	647	6·4
		1929	761	572	1,333	629	499	566	6·2
		1930	608	497	1,105	487	419	454	5·1
		1931	881	680	1,561	713	582	649	7·7
Other specified causes...	—	1926	1,081	779	1,860	902	690	799	7·9
		1929	959	731	1,690	793	638	718	7·8
		1930	982	741	1,723	787	625	708	7·9
		1931	722	546	1,268	584	467	527	6·2
Ill-defined causes........	199, 200	1926	103	55	158	86	49	68	0·7
		1929	80	86	166	66	75	71	0·8
		1930	93	79	172	74	67	71	0·8
		1931	84	69	153	68	59	64	0·8
All causes..............	—	1926	13,537	10,155	23,692	11,294	8,996	10,179	100·0
		1929	12,336	9,338	21,674	10,204	8,154	9,207	100·0
		1930	12,284	9,458	21,742	9,839	7,972	8,929	100·0
		1931	11,667	8,693	20,360	9.438	7,439	8,467	100·0

30.—Proportion per 1,000 Deaths of Infants Under 1 Year of Age occurring at each Age Period, 1930.

Age at Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
Under 1 month	469·7	439·7	434·2	424·4	524·9	506·3	536·5	555·3	512·5	471·3
Under 1 day	98·5	133·4	150·8	158·3	207·0	179·7	224·2	205·9	194·0	177·5
1 day and under 1 week	174·2	178·2	155·5	132·8	189·0	185·5	168·0	188·1	210·0	159·6
1 week and under 2 weeks	60·6	56·6	56·3	53·6	55·1	64·7	61·8	72·2	42·7	56·1
2 weeks and under 3 weeks	68·2	40·6	42·0	40·2	38·4	43·5	46·8	49·0	24·9	40·8
3 weeks and under 1 month	68·2	30·9	29·6	39·5	35·4	32·9	35·6	40·1	40·9	37·3
1 month and under 2 months	136·4	105·7	121·2	112·2	84·8	84·1	94·3	98·0	80·1	101·6
2 months and under 3 months	45·5	84·3	82·1	95·9	67·5	81·2	75·6	67·7	60·5	83·0
3 months and under 4 months	68·2	75·8	68·7	67·0	57·6	60·9	62·5	65·1	74·7	64·7
4 months and under 5 months	30·3	52·3	62·0	57·7	49·4	53·1	45·0	39·2	49·8	53·2
5 months and under 6 months	37·9	40·6	51·5	47·7	38·4	36·7	36·2	42·8	44·5	43·6
6 months and under 7 months	53·0	36·3	27·7	41·9	42·4	36·7	35·6	18·7	42·7	39·3
7 months and under 8 months	37·9	43·8	41·0	37·8	35·9	30·9	31·2	27·6	28·5	36·2
8 months and under 9 months	30·3	38·4	23·9	33·6	29·5	30·9	23·1	28·5	26·7	31·0
9 months and under 10 months	45·5	35·2	40·1	32·5	32·9	28·0	25·0	21·4	48·0	32·2
10 months and under 11 months	22·7	20·3	23·9	25·9	22·2	30·0	20·0	23·2	14·2	24·0
11 months and under 1 year	22·7	27·7	23·9	23·4	14·4	21·3	15·0	12·5	17·8	20·0
Totals	**1000·0**	**1000·0**	**1000·0**	**1000·0**	**1000·0**	**1000·0**	**1000·0**	**1000·0**	**1000·0**	**1000·0**

Infantile Mortality in Canadian Cities and Towns.—Table **31** shows for the cities and towns of 10,000 population and over, the numbers of infant deaths and the death rates per 1,000 living births for the years 1928-31. In the latest year Outremont, Que., had the lowest infant death rate, namely, 20·2, with Sydney, 24·9, the next lowest. St. Hyacinthe, Quebec, Three Rivers, Lévis, Sorel, Joliette, Hull, Shawinigan Falls, Timmins and Montreal have all very high infant death rates for 1931, but it is noteworthy that in the cases of St. Hyacinthe, Quebec, Shawinigan Falls and Montreal there is substantial improvement over the preceding year.

31.—Deaths and Death Rates of Children Under One Year of Age (Exclusive of Stillbirths) in Cities and Towns of 10,000 and Over, 1928-31.

City or Town.	Infant Deaths.				Rates per 1000 Living Births.			
	1928.	1929.	1930.	1931.	1928.	1929.	1930.	1931.
Belleville, Ont	29	26	27	23	78·2	71·0	68·4	54·2
Brandon, Man	29	29	20	22	69·2	71·4	53·5	59·6
Brantford, Ont	45	67	74	39	63·3	94·1	101·1	56·9
Calgary, Alta	108	115	125	82	61·6	57·3	60·6	43·5
Charlottetown, P.E.I	21	34	33	25	76·9	127·8	98·2	67·4
Chatham, Ont	40	31	47	40	81·0	65·3	83·2	87·7
Chicoutimi, Que	69	58	57	49	116·4	104·5	114·5	100·0
Cornwall, Ont	57	39	39	46	116·8	79·3	80·9	100·0
East Windsor, Ont	25	25	22	15	72·0	62·0	59·1	49·7
Edmonton, Alta	137	161	136	146	63·8	70·9	56·9	60·8
Fort William, Ont	52	59	36	50	78·3	91·5	57·8	76·1
Galt, Ont	18	14	22	14	67·7	49·3	70·7	43·6
Glace Bay, N.S	73	70	96	67	107·2	104·9	128·9	96·7
Granby, Que	22	33	32	35	72·6	98·8	94·7	90·2
Guelph, Ont	27	18	23	29	74·6	47·4	56·2	79·9
Halifax, N.S	102	161	119	134	71·6	110·7	76·5	81·2
Hamilton, Ont	190	235	187	196	63·2	74·2	55·1	59·0
Hull, Que	142	117	111	126	142·1	129·1	108·9	127·9
Joliette, Que	51	43	43	45	137·5	135·6	129·5	131·2
Kingston, Ont	44	64	66	46	76·4	103·4	100·2	71·3
Kitchener, Ont	35	47	41	40	46·6	57·9	49·5	47·0
Lachine, Que	50	50	36	44	107·8	107·8	86·3	89·6
Lethbridge, Alta	34	46	37	49	81·7	94·5	63·7	85·7
Lévis, Que	44	30	29	41	140·6	96·8	93·9	143·9
London, Ont	76	84	102	75	52·9	61·6	68·7	51·7
Medicine Hat, Alta	33	19	15	23	87·5	42·1	32·5	57·4
Moncton, N.B	37	35	40	25	76·8	62·4	76·2	44·9

31.—Deaths and Death Rates of Children Under One Year of Age (Exclusive of Stillbirths) in Cities and Towns of 10,000 and Over, 1928-31—concluded.

City or Town.	Infant Deaths.				Rates per 1000 Living Births.			
	1928.	1929.	1930.	1931.	1928.	1929.	1930.	1931.
Montreal, Que.	2,925	2,717	2,635	2,348	144·4	131·8	125·2	114·1
Moose Jaw, Sask.	42	35	40	37	68·1	55·6	67·1	72·3
New Westminster, B.C.	29	28	31	23	54·2	52·1	55·9	39·1
Niagara Falls, Ont.	34	41	28	26	76·4	81·8	63·9	56·2
North Bay, Ont.	29	30	47	28	66·7	73·9	112·7	68·6
Oshawa, Ont.	48	47	66	49	68·3	64·6	96·2	80·7
Ottawa, Ont.	320	354	331	297	106·6	121·1	109·3	97·5
Outremont, Que.	8	10	11	2	73·4	78·7	89·4	20·2
Owen Sound, Ont.	18	17	14	21	48·9	45·2	44·7	62·1
Peterborough, Ont.	30	48	47	39	53·8	77·8	73·6	63·7
Port Arthur, Ont.	35	55	40	33	62·7	94·5	70·9	65·5
Quebec, Que.	776	624	819	663	173·5	140·0	183·9	148·6
Regina, Sask.	84	103	104	71	61·6	67·9	62·5	47·0
St. Boniface, Man.	52	63	66	62	62·7	70·5	67·3	61·1
St. Catharines, Ont.	50	37	42	27	87·7	64·9	62·6	43·1
St. Hyacinthe, Que.	50	43	72	65	158·7	118·8	191·5	175·2
St. Jean, Que.	28	23	24	28	83·1	75·2	73·6	88·6
Saint John, N.B.	103	133	109	111	95·1	115·7	89·1	91·3
St. Thomas, Ont.	12	18	27	22	35·2	58·8	83·9	73·3
Sandwich, Ont.	21	17	12	7	96·3	81·7	61·2	41·7
Sarnia, Ont.	30	31	22	28	70·4	66·0	48·9	60·3
Saskatoon, Sask.	83	74	79	52	79·4	65·1	64·0	45·5
Sault Ste. Marie, Ont.	38	46	51	26	60·6	69·2	79·4	40·9
Shawinigan Falls, Que.	122	104	82	72	173·5	162·0	125·6	115·2
Sherbrooke, Que.	66	69	84	89	87·6	84·4	101·0	111·4
Sorel, Que.	50	66	62	44	170·6	225·3	204·6	139·7
Stratford, Ont.	19	18	17	28	47·4	47·7	41·9	71·4
Sudbury, Ont.	53	73	69	82	117·0	129·2	95·8	98·8
Sydney, N.S.	35	22	41	16	72·3	43·8	66·7	24·9
Thetford Mines, Que.	44	71	65	36	89·4	139·2	122·4	86·1
Three Rivers, Que.	234	215	232	229	162·0	166·8	171·9	172·6
Timmins, Ont.	57	68	53	61	131·9	127·6	104·7	114·9
Toronto, Ont.	895	1,002	1,022	887	72·5	80·3	75·2	69·8
Valleyfield, Que.	23	30	38	31	71·4	102·0	111·8	88·1
Vancouver, B.C.[1]	164	159	153	157	43·0	41·1	38·2	42·1
Verdun, Que.	115	88	81	95	108·7	80·4	71·7	81·8
Victoria, B.C.	35	33	37	19	48·4	43·8	50·4	27·6
Walkerville, Ont.	25	46	36	32	58·8	73·7	54·5	49·8
Welland, Ont.	26	20	19	25	93·2	62·9	63·8	82·5
Westmount, Que.	6	2	44	39	142·9	39·2	120·5	109·6
Windsor, Ont.	108	122	111	88	64·2	73·8	73·5	70·9
Winnipeg, Man.	278	250	269	214	61·1	56·2	58·1	48·1
Woodstock, Ont.	14	14	15	10	62·2	51·1	55·1	38·6

[1] Though Point Grey and South Vancouver were not incorporated into Vancouver until Jan. 1, 1929, their statistics are included in the figures for Vancouver for the year 1928 for comparative purposes.

Infantile Mortality in Various Countries.—The rate of infantile mortality to living births has been greatly reduced in civilized countries by the recent advances in medical science and in sanitation. The low record is held at the present time by New Zealand, where in 1931 the rate of infantile mortality was only 32·2 per 1,000 living births as compared with 68 in 1905. Norway, the Netherlands and Switzerland, with rates of 45·6, 49·6 and 49·4 in the latest available years, were the lowest among European countries.

As showing the improvement in recent years, it may be stated that the rate of infantile mortality in England and Wales has been reduced from 128 per 1,000 living births in 1905 to 66·4 in 1931, while the rate in Germany has declined from 196 in 1904 to 82·8 in 1930. In the Netherlands, again, the rate has declined from 131 per 1,000 living births in 1905 to 49·6 in 1931. Statistics are given in Table 32 by leading countries and by provinces.

32.—Infantile Mortality per 1,000 Living Births in Various Countries of the World in Recent Years.

Country or Province.	Year.	Rate of Infantile Mortality.	Country or Province.	Year.	Rate of Infantile Mortality.
New Zealand	1931	32·2	Nova Scotia	1931	78·7
South Australia	1931	36·4	Denmark	1930	80·0
Queensland	1931	36·7	Scotland	1931	81·8
Western Australia	1931	41·5	Germany	1931	82·8
Australia	1931	42·1	**Canada**	**1931**	**84·7**
New South Wales	1931	43·5	New Brunswick	1931	87·4
Victoria	1931	44·5	Latvia	1930	90·0
Norway	1930	45·6	Prussia	1929	97·9
Tasmania	1931	46·0	Belgium	1930	99·5
British Columbia	1931	49·4	Uruguay	1930	99·7
Switzerland	1931	49·4	Estonia	1930	100·1
Netherlands	1931	49·6	Austria	1930	103·6
Sweden	1931	57·2	Italy	1930	105·5
United States (Birth Reg. Area)	1931	61·7	Newfoundland	1931	109·4
British Isles	1930	63·4	Spain	1930	117·1
Manitoba	1931	64·3	Japan	1930	124·1
Union of South Africa (Whites)	1931	64·6	Salvador	1928	132·3
England and Wales	1931	66·4	Czechoslovakia	1930	137·5
Northern Ireland	1930	67·9	Jamaica	1930	141·0
Prince Edward Island	1931	68·1	Egypt	1928	150·3
Saskatchewan	1931	68·6	Ceylon	1931	157·9
Irish Free State	1931	68·9	Costa Rica	1928	162·5
Alberta	1931	69·4	Hungary	1931	162·9
Ontario	1931	69·8	British India	1929	178·4
Finland	1930	75·1	Roumania	1928	184·4
France	1931	75·9	Chile	1930	234·4

Infantile Mortality in Great Cities of the World.—In former times cities were considered to be "the graveyards of population". Deaths, consequent upon the rapid spread of infectious diseases, were generally more numerous than births, and it was the prevailing opinion that cities would naturally come to an end if they were not being constantly reinforced by fresh young life from the prolific countryside. The unhealthiness of cities was especially destructive of infant life, and it is one of the greatest triumphs of our time that city life is in our day, if not as healthy, yet not necessarily more dangerous to human nor to infant life than the average living conditions in the country as a whole.

To give particular examples, the rate of infantile mortality in London, England, was 59 per 1,000 living births in 1930, as compared with a rate for England and Wales of 60 per 1,000. In 1930 New York experienced an infantile mortality of 58 per 1,000, as against a rate of 64 per 1,000 for the birth registration area of the United States. Paris, on the other hand, had in 1929 an infantile mortality of 99 per 1,000 living births, as compared with 96 for France. Again, Berlin in 1930 had an infant mortality of 73 per 1,000 living births, as compared with 84 in Germany, and Vienna an infant mortality in 1929 of 79 per 1,000 living births, as compared with 112·3 for Austria in the same year.

In Canada, Montreal had in 1931 an infantile mortality of 114·1 per 1,000 living births as compared with 112·9 for the province of Quebec. Toronto, too, had in 1931 an infantile mortality rate of 69·8 per 1,000 living births as against

69·8 for the province of Ontario, while Winnipeg and Vancouver had much lower infantile mortality rates than their respective provinces. Vancouver, indeed, has one of the lowest infantile mortality rates in the world.

33.—Infantile Mortality per 1,000 Living Births in Great Cities of the World in 1930 or the Most Recent Year.

City.	Year.	Rate of Infantile Mortality.	City.	Year.	Rate of Infantile Mortality.
Oslo	1930	35	Sheffield	1930	67
Auckland	1930	35	London, Ont	1930	69
Amsterdam	1930	37	Washington	1930	71
Vancouver	1930	38	Antwerp	1929	73
Brisbane	1930	39	Berlin	1930	73
Wellington	1930	40	Hamburg	1930	74
Stockholm	1930	46	Toronto	1930	75
Frankfort-on-Main	1930	49	Moncton	1930	76
Victoria, B.C	1930	50	Halifax	1930	77
Sydney, N.S.W	1930	50	Manchester	1930	77
Melbourne	1930	51	Munich	1930	79
Perth, W. Australia	1930	51	Vienna	1929	79
Brandon	1930	53	Cologne	1930	81
Chicago	1930	54	Edinburgh	1930	82
Adelaide	1930	55	Liverpool	1930	82
Hamilton	1930	55	Leipzig	1930	83
Edmonton	1930	57	Cork	1929	85
New York	1930	58	Saint John	1930	89
Winnipeg	1930	58	Breslau	1930	94
London, Eng	1930	59	Johannesburg	1930	96
Copenhagen	1930	60	Prague	1929	98
Calgary	1930	61	Paris	1929	99
Birmingham	1930	61	Glasgow	1930	101
Hobart	1930	61	Ottawa	1930	109
Regina	1930	63	Montreal	1930	125
Saskatoon	1930	64	Quebec	1930	184
Cape Town	1930	65	Madras	1929	254
Dresden	1930	65	Bombay	1929	299

The infant mortality in the cities of Canada has been greatly reduced in the years since the inauguration of Dominion vital statistics. Thus the rate for Toronto has fallen from 90 in 1921 to 70 in 1931, that for Winnipeg from 78 to 48, for Vancouver from 56 to 42, for Hamilton from 88 to 59, for Ottawa from 130 to 97, for London from 92 to 52, for Edmonton from 89 to 61, for Halifax from 135 to 81, for Saint John from 147 to 91. Altogether, in the 13 cities of 40,000 population and over in the former registration area of Canada, there were 41,923 living births in 1921 and 3,833 infant deaths, being a rate of 91 per 1,000 living births. In 1931 in these same cities there were 39,758 living births but only 2,510 infant deaths, or a rate of 63 per 1,000 living births.

Maternal Mortality.—Of cognate interest with infantile mortality is the maternal mortality arising out of child-birth. This maternal mortality is shown by Table **34** to be at its lowest among mothers in their twenties and to increase with mothers of more advanced years. The mortality among mothers of different ages per 1,000 living births in the nine provinces is shown for the years 1926-31, with totals for all ages. The maternal mortality is shown by age groups for 1931 and by totals for earlier years in Table **35**, also by causes for 1931 in Table **36**.

34.—Maternal Deaths in Canada, by Age Groups, with Rates per 1,000 Living Births, 1926-31.

Age Group.	Year.	Living Births.	Maternal Deaths. No.	Maternal Deaths. Rate per 1,000 Living Births.
Under 20 years..	1926	13,094	58	4·4
	1927	13,669	59	4·3
	1928	14,361	77	5·4
	1929	14,828	79	5·3
	1930	15,341	92	6·0
	1931	15,393	70	4·5
20-24 years......	1926	54,953	247	4·5
	1927	56,317	222	3·9
	1928	58,139	251	4·3
	1929	59,528	234	3·9
	1930	62,427	253	4·1
	1931	61,371	193	3·1
25-29 years......	1926	63,345	256	4·0
	1927	62,957	277	4·4
	1928	63,456	260	4·1
	1929	63,943	282	4·4
	1930	65,722	315	4·8
	1931	65,866	254	3·9
30-39 years......	1926	85,993	579	6·7
	1927	85,877	568	6·6
	1928	85,430	579	6·8
	1929	82,356	566	6·9
	1930	84,878	570	6·7
	1931	83,344	535	6·4
40-49 years......	1926	15,340	175	11·4
	1927	15,329	173	11·3
	1928	15,339	163	10·6
	1929	14,729	180	12·2
	1930	15,097	175	11·6
	1931	14,477	163	11·3
50 years and over..........	1926	25	2	–
	1927	39	1	–
	1928	32	1	–
	1929	31	–	–
	1930	30	–	–
	1931	22	–	–
Totals.......	**1926**	**232,750**	**1,317**	**5·7**
Totals.......	**1927**	**234,188**	**1,300**	**5·6**
Totals.......	**1928**	**236,757**	**1,331**	**5·6**
Totals.......	**1929**	**235,415**	**1,341**	**5·7**
Totals.......	**1930**	**243,495**	**1,405**	**5·8**
Totals.......	**1931**	**240,473**	**1,215**	**5·1**

35.—Maternal Deaths in each Province by Age Groups, 1931, with Totals and Rates per 1,000 Living Births for 1926-31 and Averages for 1921-26 and 1926-30.

Age Group.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
15-19........................	–	9[3]	2	15	21	7	3	7	6	70
20-24........................	3	3	11	63	69	7	13	16	8	193
25-29........................	4	10	7	90	82	19	15	8	19	254
30-39........................	5	20	31	174	158	29	50	43	24	534
40 years and over..............	1	13	9	58	41	7	12	13	9	163
Age not stated..................	–	–	–	–	1	–	–	–	–	1
Totals, 1931.............	**13**	**55**	**60**	**400**	**372**	**69**	**93**	**87**	**66**	**1,215**
Totals, 1930..............	5	76	57	463	440	75	112	114	63	1,405
Totals, 1929..............	13	45	75	430	368	97	132	123	58	1,341
Totals, 1928..............	11	57	58	444	396	74	124	106	61	1,331
Totals, 1927..............	4	76	65	403	403	72	114	95	68	1,300
Totals, 1926..............	8	51	66	427	381	87	147	85	65	1,317
Average, 1926-30.........	8	61	64	433	398	81	126	105	63	1,339
Average, 1921-25.........	9	70	51	[2]	386	87	127	97	61	[2]
Rate per 1,000 living births, 1931.	6·9	4·7	5·6	4·8	5·4	4·8	4·4	5·0	6·3	5·1
Rate per 1,000 living births, 1930.	2·9	6·7	5·4	5·5	6·2	5·2	5·1	6·5	5·8	5·8
Rate per 1,000 living births, 1929.	7·8	4·2	7·3	5·3	5·4	6·8	6·2	7·3	5·6	5·7
Rate per 1,000 living births, 1928.	6·1	5·2	5·8	5·3	5·8	5·1	5·8	6·8	5·9	5·6
Rate per 1,000 living births, 1927.	2·4	6·8	6·2	4·9	6·0	5·1	5·4	6·4	6·7	5·6
Rate per 1,000 living births, 1926.	4·6	4·6	6·4	5·2	5·6	5·9	7·1	5·9	6·5	5·7
Average, 1926-30.........	4·6	5·5	6·2	5·2	5·8	5·6	5·9	6·6	6·1	5·7
Average, 1921-25.........	4·6	5·8	4·6	[2]	5·4	5·2	5·9	6·3	5·9	[2]

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[1] Yukon and Northwest Territories are not included. [2] Quebec was not included in the registration area prior to 1926. [3] Includes one mother under 15 years.

36.—Maternal Deaths in each Province, by Causes of Death, 1931.

NOTE.—For totals in 1930 and previous years, see Table 35.

Cause of Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
Abortion with septic conditions..	–	2	5	29	49	7	12	15	5	124
(a) Abortion....................	–	1	5	28	41	6	8	15	4	108
(b) Self-induced abortion.......	–	1	–	1	8	1	4	–	1	16
Abortion without mention of septic conditions (hæmorrhage included)....................	–	1	2	17	11	3	4	4	7	49
(a) Abortion....................	–	1	2	14	7	3	2	4	7	40
(b) Self-induced abortion.......	–	–	–	3	4	–	2	–	–	9
Ectopic gestation.................	–	4	–	6	13	5	5	1	5	39
(a) With septic conditions......	–	2	–	3	2	–	1	1	–	9
(b) Without mention of septic conditions................	–	2	–	3	11	5	4	–	5	30
Other accidents of pregnancy (hæmorrhage excluded).......	–	–	–	3	5	–	2	–	1	11
Puerperal hæmorrhage............	1	4	6	50	40	5	15	12	4	137
(a) Placenta prævia.............	1	–	1	25	22	1	6	4	2	62
(b) Other hæmorrhage.........	–	4	5	25	18	4	9	8	2	75
Puerperal septicæmia (not specified as consequent upon abortion).........................	4	13	10	131	78	25	20	19	10	310
(a) Puerperal septicæmia or pyæmis..................	4	13	10	131	74	25	20	19	10	306
(b) Puerperal tetanus...........	–	–	–	–	4	–	–	–	–	4
Puerperal albuminuria and eclampsia.......................	5	11	19	75	69	12	15	11	12	229
Other toxæmias of pregnancy.....	1	2	4	19	18	4	2	10	1	61
Puerperal phlegmasia alba dolens, embolism or sudden death (not specified as septic)......	1	10	6	43	51	5	10	5	10	141
(a) Phlegmasia alba dolens and thrombosis..............	–	1	–	6	8	1	–	1	2	19
(b) Embolism.................	–	4	3	14	29	3	8	2	7	70
(c) Sudden death	1	5	3	23	14	1	2	2	1	52
Other accidents of childbirth....	1	7	4	18	31	2	7	8	9	87
(a) Cæsarean section...........	–	4	2	1	16	–	1	2	2	28
(b) Dystocia.................	–	1	–	8	3	1	3	4	1	21
(c) Instrumental delivery......	–	1	–	3	4	–	1	1	1	11
(d) Rupture of uterus in parturition................	–	–	1	2	1	–	1	–	–	5
(e) Other accidents of labour.	1	1	1	4	7	1	1	1	5	22
Other or not specified condition of the puerperal state...........	–	1	4	9	7	1	1	2	2	27
(a) Puerperal diseases of the breast..................	–	–	–	–	–	–	1	–	–	1
(b) Others under this title......	–	1	4	9	7	1	–	2	2	26
Totals..................	**13**	**55**	**60**	**400**	**372**	**69**	**93**	**87**	**66**	**1,215**

As compared with the previous year, the number of maternal deaths shows a decrease of 190 or about 13 p.c. All provinces except Prince Edward Island, New Brunswick and British Columbia show substantial decreases compared with 1930. In fact, for the first time since 1921, when statistics covered the provinces other than Quebec, and since 1926, when figures were made available for all provinces, a significant decrease of such deaths is shown. An analysis by causes is not possible, since the 1929 "Revision of the International List of Causes" was used in 1931 and comparability with previous years has thereby been disturbed.

CHAPTER VI.—IMMIGRATION.

While the great majority of French-Canadians can trace their descent to ancestors who left the Old World 250 years ago or even longer, most English-speaking Canadians are comparative newcomers both to Canada and to this continent, though a considerable number of the United Empire Loyalist families had been resident in the old colonies for generations before they moved north to establish English-speaking settlements in what is now the Dominion of Canada. During the middle third of the nineteenth century a great English-speaking migration entered the province of Ontario and made it for the first time more populous than the sister province of Quebec, thus bringing about the agitation for representation by population. Thereafter immigration slackened until the dawn of the twentieth century brought another flood of settlers to the newly opened territories of the great Northwest, resulting in an increase of population between the censuses of 1901 and 1911 greater than the combined increase of the three decades from 1871 to 1901.

Immigration during the second decade of the twentieth century promised at its commencement to be even greater than during the first. In its first three years no fewer than 1,141,547 persons entered Canada for purposes of settlement, but the Great War, which commenced for Canada on Aug. 4, 1914, dried up the sources of our immigration in Great Britain and Continental Europe, where every able-bodied man was needed for the defence of his country. Immigrant arrivals from the United Kingdom in 1918 numbered only about 3,000, as compared with 150,000 in 1913; immigrant arrivals from Continental Europe numbered less than 3,000 in 1916, as compared with approximately 135,000 in 1914. Since the War, immigration to the Dominion has never approached that of the pre-war period.

Section 1.—Statistics of Immigration.

Immigration to Canada, as to other new countries, is generally greatest in "boom" periods, when capital as well as labour is leaving the older countries for the newer in order to secure the more remunerative investments generally to be found in virgin territories where the natural resources are still unexploited. In periods of depression, however, the sending abroad of both capital and labour is diminished, both preferring at such times to endure the ills which they know at home rather than take the risks of a new adventure at a distance. Indeed, the depression which began about the close of 1929, with its accompanying unemployment and unsold surplus of farm products, raised the question whether it was desirable that Canada should accept immigrants in any considerable number. Therefore the Government, on Aug. 14, 1930, passed an Order in Council whereby immigrants, except Britishers coming from the Mother Country or self-governing Dominions and United States citizens coming from the United States, were allowed to come in only if they belonged to one of two classes—(a) wives and unmarried children under eighteen years of age, joining family heads established in Canada and in a position to look after their dependants; (b) agriculturists with sufficient money to begin farming in Canada. This limitation applies to the whole continent of Europe as well as to many other countries. Regulations affecting immigration from the British Isles, the British Dominions or the United States have not been changed but a policy of no solicitation has been rigidly adopted. In harmony with this policy the Department of Immigration and Colonization during 1931 closed all its Canadian Government Information Bureaus in the United States and reduced its representation in the British Isles.

For many years the Immigration Regulations have contained a general provision that immigrants coming to Canada must have sufficient funds to look after themselves until employment is secured. Naturally, when employment is readily available a sum would be considered sufficient which would be insufficient in periods of unemployment, and the enforcement of this regulation is an important factor in reducing immigration at the present time. There is also in effect an Order in Council (Aug. 7, 1929), prohibiting the landing in Canada of any immigrant coming under contract or agreement, expressed or implied, to perform labour or service of any kind in Canada, but this regulation does not apply to farmers, farm labourers, or houseworkers. Under the Order, the Minister of Immigration and Colonization may admit any contract labourer if satisfied that his labour or service is required in Canada.

The relationship of prosperity and adversity to immigration is illustrated by Table **2**, which shows that during the past thirty-five years immigration was at its minimum in the year of deepest depression, 1897; that it steadily increased from that time until 1908; that a decline took place in the fiscal year ended Mar. 31, 1909, on account of the short depression of 1908; and that thereafter immigration steadily increased till 1913. In the fiscal years 1915 to 1919, political rather than economic conditions restricted immigration but, with the expansion of business at the end of the War, our immigration was more than doubled, while the depression which characterized 1921 and 1922 is reflected in the declining immigration of the fiscal years ended Mar. 31, 1922 and 1923. An improvement in business conditions in 1923 was reflected in an increase of immigration during the fiscal year ended Mar. 31, 1924, when 148,560 settlers entered Canada as compared with less than half that number in the preceding year. The fiscal years ended Mar. 31, 1925 and 1926, showed declines of 24·4 and 35·3 p.c. respectively from the 1924 level, but the fiscal years ended 1927 to 1929 showed increases in harmony with the general upward trend of business. The fiscal year ended Mar. 31, 1930, showed a slight falling off, and the restrictions on immigration imposed since August, 1930, referred to on p. 185, have been mainly instrumental in reducing the total of immigrant arrivals from 163,288 in 1930 to 88,223 and 25,752 for the fiscal years 1931 and 1932 respectively.

The number of immigrant settlers in Canada is shown by calendar years from 1867 to 1880 in Table **1**, and the number of immigrant arrivals in Canada from the United Kingdom, the United States and other countries, is given by years from 1881 in Table **2**.

1.—Number of Immigrants settling in Canada in each of the calendar years 1867-1880.

(Compiled from the Reports of the Minister of Agriculture.)

Year.	Number.	Year.	Number.
1867	14,666	1874	39,373
1868	12,765	1875	27,382
1869	18,630	1876	25,633
1870	24,706	1877	27,082
1871	27,773	1878	29,807
1872	36,578	1879	40,492
1873	50,050	1880	38,505

2.—Number of Immigrant Arrivals in Canada from the United Kingdom, the United States and other Countries, calendar or fiscal years ended 1881-1932.

NOTE.—See table on page 145 for estimate of the movement of population between the censuses of 1901 and 1921.

Calendar or Fiscal Year.	Immigrant Arrivals from—			Total.[1]	Fiscal Year.	Immigrant Arrivals from—			Total.[1]
	United Kingdom.	United States.[1]	Other Countries.			United Kingdom.	United States.[1]	Other Countries.	
1881[2]	17,033	21,822	9,136	47,991	1907[4]	55,791	34,659	34,217	124,667
1882[2]	41,283	58,372	12,803	112,458	1908	120,182	58,312	83,975	262,469
1883[2]	45,439	78,508	9,677	133,624	1909	52,901	59,832	34,175	146,908
1884[2]	31,787	65,886	6,151	103,824	1910	59,790	103,798	45,206	208,794
1885[2]	18,591	57,506	3,072	79,169	1911	123,013	121,451	66,620	311,084
1886[2]	23,507	40,650	4,995	69,152	1912	138,121	133,710	82,406	354,237
1887[2]	31,104	41,046	12,376	84,526	1913	150,542	139,009	112,881	402,432
1888[2]	30,852	44,952	12,962	88,766	1914	142,622	107,530	134,726	384,878
1889[2]	19,384	67,896	4,320	91,600	1915	43,276	59,779	41,734	144,789
1890[2]	21,793	50,336	2,938	75,067	1916	8,664	36,937	2,936	48,537
1891[2]	22,042	52,516	7,607	82,165	1917	8,282	61,389	5,703	75,374
1892[2]	22,636	–	8,360	30,996	1918	3,178	71,314	4,582	79,074
1893[2]	20,071	–	9,562	29,633	1919	9,914	40,715	7,073	57,702
1894[2]	16,004	–	4,825	20,829	1920	59,603	49,656	8,077	117,336
1895[2]	14,956	–	3,834	18,790	1921	74,262	48,059	26,156	148,477
1896[2]	12,384	–	4,451	16,835	1922	39,020	29,345	21,634	89,999
1897[2]	11,383	2,412	7,921	21,716	1923	34,508	22,007	16,372	72,887
1898[2]	11,173	9,119	11,608	31,900	1924	72,919	20,521	55,120	148,560
1899[2]	10,660	11,945	21,938	44,543	1925	53,178	15,818	42,366	111,362
1900[3]	5,141	8,543	10,211	23,895	1926	37,030	18,778	40,256	96,064
1901	11,810	17,987	19,352	49,149	1927	49,784	21,025	73,182	143,991
1902	17,259	26,388	23,732	67,379	1928	50,872	25,007	75,718	151,597
1903	41,792	49,473	37,099	128,364	1929	58,880	30,560	78,282	167,722
1904	50,374	45,171	34,786	130,331	1930	64,082	30,727	68,479	163,288
1905	65,359	43,543	37,364	146,266	1931	27,584	24,280	36,359	88,223
1906	86,796	57,796	44,472	189,064	1932	7,088	14,297	4,367	25,752

[1] The figures of immigration from the United States for the years 1881 to 1891 do not distinguish between immigrants and non-immigrants. As the U.S.-born population of Canada, according to the census, increased only from 77,753 to 80,915 between 1881 and 1891, it would appear that the number of permanent immigrants from the United States in these years must have been comparatively small. No statistics of immigrants from the U.S. were collected for the years 1892 to 1896. [2] Calendar year. [3] Six months, January to June, inclusive. [4] Nine months ended March 31.

Sex and Conjugal Condition of Immigrants.—As shown by Table 3, the 25,752 immigrants who came to Canada in the fiscal year ended Mar. 31, 1932, included 11,988 males and 13,764 females, males constituting only 46·5 p.c. of the total. Male immigrants normally exceed female immigrants as is shown in Table 4.

3.—Sex and Conjugal Condition of Immigrants into Canada, by Age Groups, fiscal year ended Mar. 31, 1932.

Age Group in Years.	Male.					Female.				
	Single.	Married.	Widowed.	Divorced.	Total.	Single.	Married.	Widowed.	Divorced.	Total.
0–14	4,270	–	–	–	4,270	4,110	–	–	–	4,110
15–19	1,388	9	–	–	1,397	794	164	2	–	960
20–24	761	160	1	–	922	637	1,012	6	3	1,658
25–29	620	493	2	4	1,119	496	1,420	15	10	1,941
30–39	473	1,340	22	21	1,856	427	2,094	73	30	2,624
40–49	184	1,035	38	17	1,274	166	920	136	18	1,240
50 and over	112	815	200	23	1,150	131	601	483	16	1,231
Totals	**7,808**	**3,852**	**263**	**65**	**11,988**	**6,761**	**6,211**	**715**	**77**	**13,764**

4.—Sex Distribution of Immigrants as Adult Males, Adult Females and Children, fiscal years ended Mar. 31, 1911-32.

Fiscal Year.	Adult Males.	Adult Females.	Children under 14.	Total.	Fiscal Year.	Adult Males.	Adult Females.	Children under 14.	Total.
1911	185,198	71,038	54,848	311,084	1922	38,597	32,042	19,360	89,999
1912	211,266	82,922	60,049	354,237	1923	33,286	24,756	14,845	72,887
1913	238,779	95,168	68,485	402,432	1924	87,623	38,763	22,169	148,560
1914	224,348	94,028	66,502	384,878	1925	55,478	34,294	21,590	111,362
1915	74,143	41,990	28,656	144,789	1926	46,963	26,611	22,490[1]	96,064
1916	23,139	15,478	9,920	48,537	1927	80,512	33,277	30,202[1]	143,991
1917	43,074	19,537	12,763	75,374	1928	82,204	36,978	32,415[1]	151,597
1918	47,497	17,775	13,802	79,074	1929	94,861	38,937	33,924[1]	167,722
1919	25,842	18,594	13,266	57,702	1930	74,062	47,534	41,692[1]	163,288
1920	40,872	50,006	26,458	117,336	1931	34,317	28,777	25,129[1]	88,223
1921	70,808	49,377	28,292	148,477	1932	6,664	9,133	9,955[1]	25,752

[1] "Children" since 1926 includes all under 18 years of age.

Racial Origins of Immigrants.—Where there is any considerable immigration into a democratic country, the racial and linguistic composition of the immigrants is of great importance. Canadians prefer that settlers should be of a readily assimilable type, already identified by race or language with one or other of the two great races now inhabiting this country and prepared for the duties of Canadian citizenship. Since the French are not, to any great extent, an emigrating people, this means in practice that the great bulk of the preferable settlers are those who speak the English language—those coming from the United Kingdom or the United States. Next in order of readiness of assimilation are the Scandinavians, Dutch and Germans, who readily learn English and are already acquainted with the working of democratic institutions. Settlers from Southern and Eastern Europe, however desirable from a purely economic point of view, are less readily assimilated, and the Canadianizing of the people who have come to Canada from these regions in the present century is a problem both in the agricultural Prairie Provinces and in the cities of the East. Less assimilable still, are those who come to Canada from the Orient. On the whole the great bulk of Canadian immigration of the past generation has been drawn from the English-speaking countries and from those continental European countries where the population is ethnically nearly related to the British, though for some years there was an increasing immigration of Slavs.

The racial origins of the immigrants who arrived in Canada in the fiscal years ended Mar. 31, 1931 and 1932 are shown in Table **5**. In the latter year the British races contributed 59 p.c. of the immigrants, French 11 p.c., and Germans 9 p.c.

5.—Racial Origins of Immigrants into Canada, arriving via Ocean Ports and from the United States, fiscal years ended Mar. 31, 1931 and 1932.

Racial Origin.	1931.			1932.		
	Via Ocean Ports.	From U.S.	Total.	*Via* Ocean Ports.	From U.S.	Total.
British Races—						
English	14,662	7,498	22,160	4,275	4,525	8,800
Irish	4,233	2,904	7,137	791	1,716	2,507
Scottish	7,872	2,917	10,789	1,843	1,732	3,575
Welsh	817	231	1,048	179	147	326
Totals, British	27,584	13,550	41,134	7,088	8,120	15,208

5.—Racial Origins of Immigrants into Canada, arriving via Ocean Ports and from the United States, fiscal years ended Mar. 31, 1931 and 1932—concluded.

Racial Origin.	1931.			1932.		
	Via Ocean Ports.	From U.S.	Total.	*Via* Ocean Ports.	From U.S.	Total.
Continental European Races—						
Albanian	25	1	26	5	–	5
Belgian	255	105	360	47	31	78
Bohemian	11	57	68	–	21	21
Bulgarian	295	–	295	15	3	18
Croatian	482	2	484	106	5	111
Czech	225	8	233	69	9	78
Dalmatian	–	–	–	–	–	–
Dutch	344	444	788	33	236	269
Estonian	63	2	65	6	1	7
Finnish	2,297	57	2,354	92	38	130
French	347	4,391	4,738	87	2,734	2,821
German[1]	7,840	2,741	10,581	727	1,532	2,259
Greek	388	48	436	20	43	63
Italian	1,007	228	1,235	414	166	580
Jewish	2,908	513	3,421	202	447	649
Lettish	28	1	29	4	2	6
Lithuanian	466	11	477	45	5	50
Magyar	2,401	71	2,472	397	41	438
Maltese	13	6	19	5	–	5
Mexican	–	–	–	–	1	1
Montenegrin	3	–	3	–	–	–
Moravian	2	–	2	–	1	1
Polish	3,997	226	4,223	554	103	657
Portuguese	5	10	15	2	2	4
Roumanian	179	44	223	22	15	37
Russian	879	97	976	74	32	106
Ruthenian	6,413	78	6,491	502	38	540
Scandinavian—						
Danish	820	184	1,004	53	87	140
Icelandic	25	17	42	–	10	10
Norwegian	740	645	1,385	70	171	241
Swedish	730	366	1,096	79	195	274
Serbian	140	18	158	31	16	47
Slovak	1,957	32	1,989	337	9	346
Spanish	8	26	34	9	11	20
Spanish American	1	1	2	2	–	2
Swiss	211	83	294	24	28	52
Turkish	7	–	7	1	1	2
Yugoslav	364	27	391	57	9	66
Totals, Continental European Races	35,876	10,540	46,416	4,091	6,043	10,134
Non-European Races—						
American Indian	–	8	8	–	34	34
Arabian	2	–	2	–	–	–
Armenian	21	1	22	4	1	5
Chinese	–	–	–	–	–	–
East Indian races	80	–	80	47	–	47
Japanese	204	1	205	195	–	195
Negro	120	158	278	15	83	98
Persian	2	–	2	–	–	–
Syrian	54	22	76	15	16	31
Totals, Non-European Races	483	190	673	276	134	410
Grand Totals	**63,943**	**24,230**	**88,223**	**11,455**	**14,297**	**25,752**

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[1] "German" includes Austrian.

Languages of Immigrants.—The languages of immigrants 10 years old and over, arriving *via* ocean ports and from the United States, are shown for the fiscal years ended Mar. 31, 1931 and 1932, in Table **6.** English-speaking immigrants constituted 78 p.c. of the total in 1932, French-speaking immigrants 5 p.c. and German speaking immigrants 3 p.c.

6.—Languages of Immigrants Ten Years Old and Over, arriving via Ocean Ports and from the United States, fiscal years ended Mar. 31, 1931 and 1932.

Language.	1931.			1932.		
	Via Ocean Ports.	From U.S.	Total.	*Via* Ocean Ports.	From U.S.	Total.
English	24,216	16,064	40,280	6,065	8,679	14,744
French	407	1,269	1,676	74	869	943
German	6,481	204	6,685	450	138	588
Norwegian	643	35	678	46	17	63
Swedish	694	35	729	53	32	85
Danish	721	26	747	36	6	42
Icelandic	19	1	20	–	3	3
Flemish	160	46	206	22	10	32
Dutch	269	22	291	22	15	37
Finnish	2,089	19	2,108	50	17	67
Estonian	51	2	53	4	1	5
Lettish	27	–	27	1	2	3
Lithuanian	432	4	436	25	1	26
Russian	940	21	961	45	8	53
Hebrew	1,231	113	1,344	85	147	232
Ruthenian Russniak Ukrainian	3,820	18	3,838	191	12	203
Polish	5,063	62	5,125	404	32	436
Roumanian	189	13	202	24	7	31
Slovenian	83	1	84	6	–	6
Czech (Bohemian)	1,714	13	1,727	207	6	213
Croat (Serbian)	727	13	740	100	5	105
Hungarian (Magyar)	1,883	26	1,909	225	21	246
Korean	–	–	–	–	–	–
Italian	788	73	861	304	69	373
Spanish	14	5	19	11	5	16
Portuguese	1	–	1	1	–	1
Greek	352	23	375	18	32	50
Albanian	19	1	20	4	–	4
Turkish	5	–	5	1	–	1
Bulgarian	301	–	301	12	4	16
Chinese	–	–	–	–	–	–
Japanese	184	–	184	185	–	185
East Indian	70	–	70	42	–	42
Armenian (Aramaic)	23	–	23	2	1	3
Syrian (Arabic)	37	7	44	5	7	12
Totals	**53,653**	**18,116**	**71,769**	**8,720**	**10,146**	**18,866**

Nationalities of Immigrants.—In the latest fiscal year, ended Mar. 31, 1932, British subjects immigrating to Canada numbered 9,147 and American citizens 12,325, or together over 83 p.c. of the total number of immigrants shown in Table **7.** Immigrants of Polish nationality ranked third with 1,234 or nearby 5 p.c.

7.—Nationalities of Immigrants, arriving via Ocean Ports and from the United States, fiscal years ended Mar. 31, 1931 and 1932.

Nationality.	1931.			1932.		
	Via Ocean Ports.	From U.S.	Total.	*Via* Ocean Ports.	From U.S.	Total.
British	28,144	2,938	31,082	7,332	1,815	9,147
United States	42	20,723	20,765	48	12,277	12,325
Mexican	2	8	10	–	–	–
Ecuadorian	–	1	1	1	1	2
Argentinian	15	3	18	1	2	3
Brazilian	1	1	2	2	–	2
Chilian	1	–	1	1	–	1
Colombian	1	4	5	–	–	–
Venezuelan	–	–	–	1	1	2
Peruvian	3	1	4	1	–	1
Uruguayan	1	–	1	–	–	–
Cuban	6	–	6	2	–	2
Porto Rican	1	–	1	–	–	–
Austrian	398	30	428	49	12	61
Belgian	290	45	335	45	2	47
Bulgarian	299	–	299	12	–	12
Czechoslovakian	2,649	15	2,664	509	6	515
Finnish	2,551	12	2,563	98	10	108
French	253	29	282	60	8	68
German	3,548	85	3,633	363	25	388
Greek	380	3	383	18	7	25
Dutch	321	20	341	30	5	35
Hungarian	2,132	6	2,138	345	8	353
Italian	955	19	974	394	16	410
Yugoslav	1,676	5	1,681	278	4	282
Polish	13,810	76	13,886	1,210	24	1,234
Roumanian	2,098	36	2,134	177	10	187
Russian	886	63	949	17	15	32
Danish	837	37	874	52	6	58
Icelandic	26	7	33	–	3	3
Norwegian	723	42	765	60	11	71
Swedish	469	40	509	67	6	73
Swiss	292	19	311	28	7	35
Ukrainian	4	2	6	3	–	3
Albanian	25	–	25	4	–	4
Estonian	81	3	84	8	–	8
Latvian	102	1	103	9	1	10
Lithuanian	650	–	650	74	3	77
Panamanian	–	–	–	2	–	2
Spanish	1	1	2	1	3	4
Luxemburger	14	–	14	–	–	–
Arabian	32	–	32	1	–	1
Armenian	5	–	5	–	–	–
Japanese	151	–	151	142	–	142
Persian	1	–	1	–	–	–
Syrian	45	5	50	6	6	12
Turkish	8	–	8	1	2	3
Danziger	14	–	14	2	–	2
Guatemalan	–	–	–	1	–	1
West Indian (not Br.)	–	–	–	–	1	1
Totals	**63,943**	**24,280**	**88,223**	**11,455**	**14,297**	**25,752**

Countries of Birth of Immigrants.—In Table 8 will be found the countries of birth of the immigrants into Canada in the latest two fiscal years. The figures show that the United States was the birthplace of more of our 1932 immigrants than any other single country, with 10,835. England came second with 4,644, Scotland third with 2,207 and Poland fourth with 1,304.

8.—Countries of Birth of Immigrants, arriving via Ocean Ports and from the United States, fiscal years ended Mar. 31, 1931 and 1932.

Country of Birth.	1931.			1932.		
	Via Ocean Ports.	From U.S.	Total.	*Via* Ocean Ports.	From U.S.	Total.
Canada	12	1,468	1,480	7	1,048	1,055
United States	209	18,430	18,639	103	10,732	10,835
England	13,174	1,594	14,768	3,627	1,017	4,644
Ireland (Free State)	1,299	148	1,447	224	108	332
Ireland (Northern)	2,758	154	2,912	489	88	577
Scotland	7,747	873	8,620	1,749	458	2,207
Wales	989	78	1,067	219	41	260
Lesser British Isles	67	12	79	27	7	34
Newfoundland	755	68	823	354	32	386
St. Pierre and Miquelon	4	–	4	4	–	4
Mexico	7	8	15	1	3	4
Central America	15	2	17	5	1	6
Argentina	16	5	21	10	1	11
Brazil	4	1	5	13	4	17
Chile	13	2	15	5	–	5
Guiana, British	36	3	39	11	1	12
Other South America	13	7	20	9	3	12
West Indies (Br.)	167	17	184	54	13	67
West Indies (not Br.)	11	10	21	13	3	16
Austria	412	78	490	57	29	86
Belgium	301	73	374	54	14	68
Bulgaria	146	–	146	10	2	12
Czechoslovakia	2,586	28	2,614	499	10	509
Finland	2,533	26	2,559	99	15	114
France	295	46	341	76	19	95
Germany	3,288	168	3,456	351	77	428
Greece	513	24	537	22	33	55
Holland	300	30	330	25	16	41
Hungary	2,128	27	2,155	352	25	377
Italy	986	65	1,051	405	60	465
Yugoslavia	1,683	16	1,699	277	6	283
Poland	13,907	128	14,035	1,219	85	1,304
Danzig	–	–	–	1	–	1
Roumania	2,114	56	2,170	175	27	202
Russia	1,156	179	1,335	64	116	180
Denmark	818	62	880	51	13	64
Iceland	27	8	35	–	3	3
Norway	725	117	842	70	32	102
Sweden	395	91	486	49	43	92
Switzerland	283	32	315	25	15	40
Ukraine	41	1	42	3	–	3
Albania	24	1	25	5	–	5
Estonia	81	2	83	7	1	8
Latvia	91	2	93	13	3	16
Lithuania	649	6	655	71	9	80
Malta	17	7	24	4	1	5
Portugal	1	–	1	2	1	3
Spain	6	2	8	3	4	7
Other European countries, including Luxemburg	43	3	46	1	1	2
Australia	196	27	223	59	34	93
New Zealand	101	19	120	27	4	31
Africa (Br.)	97	20	117	41	4	45
Africa (not Br.)	17	3	20	7	1	8
Other Asia	29	1	30	10	–	10
Armenia	6	–	6	1	–	1
China	39	5	44	24	3	27
India (Br.)	239	18	257	131	7	138
Japan	216	5	221	199	4	203
Persia	3	–	3	1	–	1
Syria	44	9	53	11	10	21
Turkey	55	4	59	7	3	10
Other countries (Br.)	35	4	39	14	2	16
Other countries (not Br.)	21	6	27	8	4	12
Born at sea	–	1	1	1	1	2
Totals	**63,943**	**24,280**	**88,223**	**11,455**	**14,297**	**25,752**

Ports of Arrival of Immigrants.—Throughout the greater part of our history, Quebec has been the port at which the greatest number of our immigrants have landed. In the past ten years, up to 1932, there was a great increase in the percentage of immigrants arriving at the port of Halifax. This would appear to be due to increasing immigration in the early spring months before the St. Lawrence is open for traffic. Figures for recent years are given in Table **9.**

9.—Immigrants Arriving in Canada, by Chief Ports of Arrival, fiscal years ended Mar. 31, 1926-32.

Port.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Quebec	40,963	63,792	64,392	74,653	70,688	34,114	6,932
Saint John	12,245	16,889	14,176	13,046	14,631	5,793	392
Halifax	20,490	37,677	43,072	44,936	42,584	20,809	2.324
North Sydney	435	712	832	1,173	1,176	538	281
Sydney	5	89	7	15	17	15	13
Montreal	144	192	272	340	516	218	136
Vancouver	1,333	1,220	1,386	1,115	1,038	791	361
Victoria	361	513	475	422	229	232	125
New York	1,163	1,402	1,641	1,397	1,607	1,386	850
Boston	26	47	218	16	23	6	2
Other ports	121	433	119	49	52	41	39
From the United States	18,778	21,025	25,007	30,560	30,727	24,280	14,297
Totals	**96,064**	**143,991**	**151,597**	**167,722**	**163,288**	**88,223**	**25,752**

Destinations of Immigrants.—The immediate destinations of the immigrants arriving in Canada are given for the years from 1901 to 1932 in Table **10,** which may be compared with the census tables on pp. 102 and 103 showing the increase of population in the decades between 1901 and 1931.

While immigration to the Maritime Provinces during the first 32 years of the twentieth century was comparatively small, totalling 211,147, that to Quebec and Ontario was very large. From 1905 to 1928 Ontario received a larger number of immigrants annually than any other province of the Dominion, while Manitoba was usually second in this respect. In 1929 immigration to Manitoba exceeded that to Ontario by 10,000 persons, but in 1930, 1931 and 1932 the positions were again reversed. The immigration to Eastern Canada (Maritime Provinces, Quebec and Ontario) has almost equalled that to Western Canada (Manitoba, Saskatchewan, Alberta and British Columbia) in the 32-year period.

10.—Destinations of Immigrants into Canada, by Provinces, fiscal years ended June 30, 1901-06, and Mar. 31, 1907-32.

Fiscal Year.	Maritime Provinces.	Quebec	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.	Not Shown.	Total.
1901	2,144	10,216	6,208	11,254	14,160		2,600	2,567	49,149
1902	2,312	8,817	9.798	17,422	22,199		3,483	3,348	67,379
1903	5,821	17.040	14,854	39,535	43,898		5,378	1,838	128,364
1904	5,448	20,222	21,266	34,911	40,397		6,994	1,093	130,331
1905	4.128	23,666	35,811	35,387	39,289		6,008	1,977	146,266
1906	6,381	25,212	52,746	35,648	28,728	26,177	12,406	1,766	189,064
1907 (9 months)	6,510	18,319	32,654	20,273	15,307	17,559	13,650	395	124,667
1908	10,360	44,157	75,133	39,789	30,590	31,477	30,768	195	262,469
1909	6,517	19,733	29,265	19,702	22,146	27,651	21,862	32	146,908
1910	10,644	28,524	46,129	21,049	29,218	42,509	30,721	–	208,794
1911	13,236	42,914	80,035	34,653	40,763	44,782	54,701	–	311,084

10.—Destinations of Immigrants into Canada, by Provinces, fiscal years ended June 30, 1901-06, and Mar. 31, 1907-32—concluded.

Fiscal Year.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.	Not Shown.	Total.
1912	15,973	50,602	100,227	43,477	46,158	45,957	51,843	-	354,237
1913	19,806	64,835	122,798	43,813	45,147	48,073	57,960	-	402,432
1914	16,730	80,368	123,792	41,640	40,999	43,741	37,608	-	384,878
1915	11,104	31,053	44,873	13,196	16,173	18,263	10,127	-	144,789
1916	5,981	8,274	14,743	3,487	6,001	7,215	2,836	-	48,537
1917	5,710	10,930	26,078	5,247	9,874	12,418	5,117	-	75,374
1918	5,247	9,059	23.754	6,252	12,382	16,821	5,559	-	79,074
1919	3,860	6,772	13,826	4,862	8,552	11,640	8,190	-	57,702
1920	5,554	13,078	39,344	11,387	14,287	20,000	13,686	-	117,336
1921	6,353	21,100	62,572	12,649	13,392	17,781	14,630	-	148,477
1922	3,222	13,724	34,590	8,904	9,894	11,825	7,840	-	89.999
1923	3,298	9,343	30,444	6,037	8,186	8,798	6,781	-	72,887
1924	7,940	19,979	65,280	21,451	13,200	10,430	10,280	-	148,560
1925	3,153	16,279	45,912	11,772	14,041	10,952	9,253	-	111,362
1926	1,670	11,367	29,293	19,079	13,816	12,540	8,212	87	96,064
1927	3,125	16,642	40,604	36,739	20,085	16,367	10,410	16	143,991[1]
1928	3,741	18,469	45,052	43,596	15,331	15,473	9,891	5	151,597[1]
1929	4,063	18,659	47,656	57,651	14,789	16,243	8,652	8	167,722[1]
1930	4,950	23,917	59,974	39,132	11,003	14,970	9,333	1	163,288[1]
1931	3,704	16,290	33,652	17,524	5,057	6,441	5,551	1	88,223[1]
1932	2,462	5,106	11,503	1,022	1,177	2,041	2,430	-	25,752[1]
Totals	**211,147**	**724,666**	**1,419,866**	**758,540**	**1,224,383**		**484,760**	**13,329**	**4,836,756**

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[1] Includes immigrants destined for the Northwest Territories: 3 in 1927, 39 in 1928, 1 in 1929, 8 in 1930, 3 in 1931 and 11 in 1932.

Occupations of Immigrant Arrivals.—The settlers most universally acceptable to Canadians are those who settle on the land or those females who enter domestic service. In Table **11** will be found statistics of the occupations of immigrants arriving in Canada during the fiscal years ended Mar. 31, 1931 and 1932.

11.—Occupations and Destinations of Immigrants Arriving in Canada, fiscal years ended Mar. 31, 1931 and 1932.

Occupation.	1931.			1932.		
	Via Ocean Ports.	From the United States.	Total.	*Via* Ocean Ports.	From the United States.	Total.
Farmers and Farm Labourers—						
Men	16,702	3,347	20,049	643	1,196	1,839
Women	2,879	1,026	3,905	256	542	798
Children	6,612	1,491	8,103	1,063	737	1,800
General Labourers—						
Men	2,649	699	3,348	311	321	632
Women	517	186	703	65	84	149
Children	1,053	194	1,247	159	87	246
Mechanics—						
Men	3,016	2,048	5,064	426	802	1,228
Women	1,017	625	1,642	148	296	444
Children	754	411	1,165	83	204	287
Clerks, Traders, etc.—						
Men	1,538	1,799	3,337	338	1,139	1,477
Women	868	795	1,663	183	466	649
Children	462	428	890	84	254	338
Miners—						
Men	136	47	183	24	37	61
Women	14	5	19	6	4	10
Children	15	6	21	2	8	10
Domestics—						
Domestics 18 years and over	9,229	594	9,823	993	279	1,272
" under 18 years	971	42	1,013	192	19	211

11.—Occupations and Destinations of Immigrants Arriving in Canada, fiscal years ended Mar. 31, 1931 and 1932—concluded.

Occupation.	1931.			1932.		
	Via Ocean Ports.	From the United States.	Total.	*Via* Ocean Ports.	From the United States.	Total.
Not Classified—						
Men	954	1,382	2,336	400	1,027	1,427
Women	7,228	3,794	11,022	2,998	2,813	5,811
Children	7,329	5,361	12,690	3,081	3,982	7,063
Totals—						
Men	24,995	9,322	34,317	2,142	4,522	6,664
Women[1]	21,752	7,025	28,777	4,649	4,484	9,133
Children	17,196	7,933	25,129	4,664	5,291	9,955
Totals	**63,943**	**24,280**	**88,223**	**11,455**	**14,297**	**25,752**
Destinations—						
Maritime Provinces	2,209	1,495	3,704	1,123	1,339	2,462
Quebec	11,571	4,719	16,290	1,983	3,123	5,106
Ontario	22,330	11,322	33,652	4,855	6,648	11,503
Manitoba	16,670	854	17,524	576	446	1,022
Saskatchewan	3,407	1,650	5,057	662	515	1,177
Alberta	3,965	2,476	6,441	978	1,063	2,041
British Columbia	3,786	1,754	5,540	1,266	1,151	2,417
Yukon and N.W.T.	4	10	14	12	12	24
Not given	1	-	1	-	-	-

[1] Includes domestics under 18 years of age.

Prohibited Immigrants.—The following is a summary of the classes whose admission to Canada is prohibited under the existing regulations. These regulations, however, do not apply to Canadian citizens or persons having Canadian domicile:—[1]

(1) Imbeciles, feebleminded persons, epileptics, insane persons, persons of constitutional psychopathic inferiority, persons suffering from chronic alcoholism and those mentally defective to such a degree as to affect their ability to earn a living.

(2) Persons afflicted with tuberculosis or with any loathsome, contagious or infectious disease or a disease which may be dangerous to public health; immigrants who are dumb, blind or otherwise physically defective.

(3) Prostitutes and women and girls coming to Canada for any immoral purpose, pimps, procurers and persons who have been convicted of any crime involving moral turpitude.

(4) Professional beggars or vagrants, charity-aided immigrants and persons who are likely to become public charges.

(5) Anarchists, persons who disbelieve in or are opposed to organized government or who belong to any organization teaching disbelief in or opposition to organized government, persons who have been guilty of espionage or high treason and persons who have been deported from Canada.

(6) Persons over fifteen years of age unable to read. The literacy test, however, does not apply to a father or grandfather over 55 years of age, or to a wife, mother, grandmother or unmarried daughter or widowed daughter.

The Immigration Act provides for the rejection and deportation of immigrants belonging to the prohibited classes, and also for the deportation of those who become undesirables within five years after legal entry.

The operation of the above regulations is illustrated in Tables **12** and **13**, which give the numbers of immigrants rejected or deported after admission, the causes of such rejection or deportation, and the nationalities of those deported, for each of the 11 fiscal years ended 1922 to 1932, together with the totals for the 19 fiscal years 1903-21 and the 30 fiscal years from 1903 to 1932 inclusive.

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[1] See also pp. 185 and 186.

12.—Rejections of Immigrants upon Arrival at Ocean Ports, by Principal Causes and Nationalities, fiscal years ended 1903-32, with Totals 1903-21 and 1903-32.

Item.	1903 to 1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	Total.
By Causes—													
Medical causes	5,094	60	37	130	83	40	95	104	94	78	39	26	5,880
Civil causes	9,080	1,023	595	862	948	226	594	215	266	243	444	298	14,794
Totals	**14,174**	**1,083**	**632**	**992**	**1,031**	**266**	**689**	**319**	**360**	**321**	**483**	**324**	**20,674**
By Nationalities—													
British	1,967	153	98	187	199	109	209	150	154	160	251	180	3,817
United States	298	7	4	6	11	–	5	2	3	8	6	4	354
Other countries	11,909	923	530	799	821	157	475	167	203	153	226	140	16,503

13.—Deportations of Immigrants after Admission, by Principal Causes and by Nationalities, fiscal years ended 1903-32, with Totals 1903-21 and 1903-32.

Item.	1903 to 1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	Total.
By Causes—													
Medical causes	3,914	313	282	649	420	410	470	519	650	600	789	697	9,713
Public charges	5,741	950	679	775	543	506	354	430	444	2,106	2,245	4,507	19,280
Criminality	3,899	630	543	511	520	453	447	426	441	591	868	1,006	10,335
Other civil causes	1,142	105	76	93	58	189	149	257	194	107	200	270	2,840
Accompanying deported persons	307	48	52	78	145	158	165	254	235	559	274	545	2,820
Totals	**15,003**	**2,046**	**1,632**	**2,106**	**1,686**	**1,716**	**1,585**	**1,886**	**1,964**	**3,963**	**4,376**	**7,025**	**44,988**
By Nationalities—													
British	7,589	1,107	888	1,377	985	899	808	1,047	1,083	2,983	3,099	4,248	26,113
United States	4,387	725	520	417	321	330	351	297	294	228	279	260	8,409
Other countries	3,027	214	224	312	380	487	426	542	587	752	998	2,517	10,466

Juvenile Immigrants.—Among the most generally acceptable immigrants are the juveniles of both sexes, many of whom have been trained by highly accredited British organizations for Canadian life before coming to Canada, the boys being taught the lighter branches of farm work, and the girls instructed in domestic occupations. On arrival in Canada the boys are placed on farms, while the girls are placed either in town or country, but the organizations remain the guardians of the children until they have reached maturity, and in addition the children are subject to efficient and recurrent government inspection until they reach their nineteenth year. This inspection is under the control of the Supervisor of Juvenile Immigration.

Under the British Empire Settlement Agreement the term "children" was applied to boys from 14 to 19 years of age and girls from 14 to 17 migrating to Canada under provincial or approved society auspices. These organizations were assisted by the Oversea Settlement Agreement, which provided free transportation for the boys and girls from the British Isles migrating to Canada under their auspices. On September 23, 1931, the societies concerned were notified that the Dominion Government had decided to withdraw from any further assistance of that nature.

The number of juvenile immigrants to Canada in each year since 1901 is given in Table **14**.

14.—British Juvenile Immigrants, fiscal years ended 1901-32.

NOTE.—Juvenile immigrants are of course included in the total number of immigrants recorded elsewhere.

Fiscal Year.	Juvenile Immigrants.	Fiscal Year.	Juvenile Immigrants.
1901	977	1917	251
1902	1,540	1918	–
1903	1,979	1919	–
1904	2,212	1920	155
1905	2,814	1921	1,426
1906	3,258	1922	1,211
1907[1]	1,455	1923	1,184
1908	2,375	1924	2,080
1909	2,424	1925	2,000
1910	2,422	1926	1,862
1911	2,524	1927	1,741
1912	2,689	1928	2,070
1913	2,642	1929	3,036
1914	2,318	1930	4,281
1915	1,899	1931	2,190
1916	821	1932	478

[1] Nine months.

Oriental Immigration.—The immigration to Canada of the Asiatic races, able because of their low standard of living to underbid the white man in selling his labour, is fundamentally an economic rather than a racial problem, affecting most of all those parts of the country which are nearest to the Orient and the classes which feel their economic position threatened. A record of Oriental immigration since the commencement of the century is given in Table **15**.

15.—Record of Oriental Immigrants, fiscal years ended 1901-32.

Fiscal Year.	Chinese.	Japanese.	East Indians.	Total.	Fiscal Year.	Chinese.	Japanese.	East Indians.	Total.
1901	2,544	6	–	2,550	1917	393	648	–	1,041
1902	3,587	–	–	3,587	1918	769	883	–	1,652
1903	5,329	–	–	5,329	1919	4,333	1,178	–	5,511
1904	4,847	–	–	4,847	1920	544	711	–	1,255
1905	77	354	45	476	1921	2,435	532	10	2,977
1906	168	1,922	387	2,477	1922	1,746	471	13	2,230
1907[1]	291	2,042	2,124	4,457	1923	711	369	21	1,101
1908	2,234	7,601	2,623	12,458	1924	674	448	40	1,162
1909	2,106	495	6	2,607	1925	–	501	46	547
1910	2,302	271	10	2,583	1926	–	421	62	483
1911	5,320	437	5	5,762	1927	–	475	60	535
1912	6,581	765	3	7,349	1928	3	478	56	537
1913	7,445	724	5	8,174	1929	1	445	52	498
1914	5,512	856	88	6,456	1930	–	194	58	252
1915	1,258	592	–	1,850	1931	–	205	80	285
1916	89	401	1	491	1932	–	195	47	242
					Totals	**61,299**	**24,620**	**5,842**	**91,761**

[1] Nine months.

Chinese Immigrants.—Oriental immigration to the Pacific Coast of North America appears to have commenced with the coming of Chinese immigrants about the time of the discovery of gold in California in 1849, and British Columbia is thought to have received its first Chinese immigrants some time before 1870. The original occupations of these immigrants were as laundrymen and domestic servants. As early as 1872 Chinese were employed in the coal mines of the province and the Legislature was already considering the imposition of a poll tax on Chinese, the same proposition coming up later in the Dominion Parliament with the design of preventing the employment of Chinese labour in railway construction. A Royal Commission was appointed by the Dominion Government in 1884 to investigate

Chinese immigration, and this Commission recommended the imposition of a head tax of $10 upon Chinese entering Canada, together with registration and special legislation regulating Chinese domestic servants. This led to the passage of legislation in 1885 (48-49 Vict., c. 71), providing that thereafter Chinese of the labouring class should be required, as a condition of entering into Canada, to pay a head tax of $50 each. On Jan. 1, 1901 (63-64 Vict., c. 32) this tax was increased to $100, and on Jan. 1, 1904 (3 Edw. VII, c. 8), after another Royal Commission had reported on this matter, the head tax was further increased to $500. This tax was paid by all Chinese immigrants except consular officers, merchants and clergymen and their families, tourists, men of science, students and teachers. In spite of this restrictive legislation, the number of Chinese enumerated at the decennial censuses rose from 4,383 in 1881 to 17,312 in 1901, to 27,774 in 1911, to 39,587 in 1921 and 46,519 in 1931. Of this latter number, 43,051 were males and only 3,468 females. Over 58 p.c. of all the Chinese in Canada, *viz.*, 27,139 were residents of British Columbia.

16.—Record of Chinese Immigrants, fiscal years ended 1912-1932, with Totals 1886-1900 and 1901-11.

Fiscal Year.	Paying Tax.	Exempt from Tax.	Percentage of Total Arrivals Admitted, Exempt from Tax.	Registrations for Leave.	Total Revenue.
	No.	No.	p.c.	No.	$
Totals (1886 to 1900, Inclusive)	**28,637**	**394**	**1·36**	**15,853**	**1,454,239**
Totals (1901 to 1911, Inclusive)	**25,160**	**3,655**	**12·69**	**29,409**	**6,147,260**
1912	6,083	498	7·57	4,322	3,049,722
1913	7,078	367	4·93	3,742	3,549,242
1914	5,274	238	4·32	3,450	2,644,593
1915	1,155	103	8·19	4,373	588,124
1916	20	69	77·53	4,064	19,389
1917	272	121	30·78	3,312	140,487
1918	650	119	15·47	2,907	336,757
1919	4,066	267	6·16	3,244	2,069,669
1920	363	181	33·27	5.529	538,479
1921	885	1,550	63·66	6,807	474,332
1922	1,459	287	16·44	7,532	743,032
1923	652	59	8·30	6,682	434,557
1924	625	51	7·54	5,661	334,039
1925	–	–	–	5,992	308,659
1926	–	–	–	3,947	25,969
1927	–	–	–	5,987	14,844
1928	2	1	33·33	5,087	25,679
1929	–	1	100·00	5,480	30,795
1930	–	–	–	5,682	30,799
1931	–	–	–	5,783	28,846
1932	–	–	–	4,387	11,584

The Chinese Immigration Act of 1923 (13-14 Geo. V, c. 38)[1] restricts the entry to or landing in Canada of persons of Chinese origin or descent, irrespective of allegiance or citizenship, other than government representatives, Chinese children born in Canada, merchants (defined by what regulations the Minister of Immigration and Colonization may prescribe) and students—the last two classes to possess passports issued by the Government of China and endorsed by a Canadian immigration officer. As a result no Chinese were admitted to the country as immigrants in the fiscal years ended 1925, 1926 and 1927; three are shown by the above table to have been admitted in 1928, one in 1929, but none in 1930, 1931 or 1932.

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[1] R.S.C. 1927, c. 95.

Japanese Immigrants.—Japanese immigration to Canada commenced about 1896, and a total of some 12,000 came in between then and 1900, but at the census of 1901 the total number enumerated as domiciled in the Dominion was only 4,738; in 1911, 9,021; in 1921, 15,868—15,006 of these latter being domiciled in British Columbia. The immigration of Japanese was especially active in the fiscal years 1906 to 1908, in which three years a total of 11,565 entered the country. In the latter year an agreement was made with the Japanese Government, under which the latter undertook to limit the number of passports issued to Japanese immigrants to Canada. The statistics of Table **15** show that Japanese immigration to Canada has been restricted to about 200 per annum in the three latest years.

In 1931 Japanese in Canada numbered 23,342, of whom 22,205 were in British Columbia.

East Indian Immigrants.—East Indian immigration to Canada, like Japanese, is shown by Table **15** to have been negligible down to 1907, when no fewer than 2,124 East Indian immigrants arrived. However, as a consequence of the operation of a regulation under section 38 of the Immigration Act of 1910, East Indian immigration has since that date been comparatively small. A resolution of the Imperial War Conference of 1918 declared that "it is the inherent function of the Governments of the several communities of the British Commonwealth that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities". However, it was recommended that East Indians already permanently domiciled in other British Countries should be allowed to bring in their wives and minor children, a recommendation which was confirmed, so far as Canada was concerned, by Order in Council of Mar. 26, 1919. However, in the ten fiscal years ended Mar. 31, 1921 to 1930, only 10, 13, 21, 40, 46, 62, 60, 56, 52 and 58 East Indian immigrants respectively were admitted, or 418 in the decade. In 1931 and 1932 the numbers were 80 and 47 respectively.

Expenditures on Immigration.—The sums expended by the Dominion Government on immigration in each of the fiscal years ended 1868 to 1932 inclusive, as stated in the Public Accounts issued annually by the Department of Finance, are shown in Table **17**.

17.—Expenditures on Immigration in the fiscal years ended 1868-1932.

(Compiled from Public Accounts.)

Year.	$	Year.	$	Year.	$	Year.	$
1868	36,050	1885	423,861	1902	494,842	1919	1,112,079
1869	26,952	1886	257,355	1903	642,914	1920	1,388,185
1870	55,966	1887	341,236	1904	744,788	1921	1,688,961
1871	54,004	1888	244,789	1905	972,357	1922	2,052,371
1872	109,954	1889	202,499	1906	842,668	1923	1,987,745
1873	265,718	1890	110,092	1907[1]	611,201	1924	2,417,374[2]
1874	291,297	1891	181,045	1908	1,074,697	1925	2,823,920[2]
1875	278,777	1892	177,605	1909	979,326	1926	2,328,931[2]
1876	338,179	1893	180,677	1910	960,676	1927	2,338,992
1877	309,353	1894	202,235	1911	1,079,130	1928	2,704,698
1878	154,351	1895	195,653	1912	1,365,000	1929	2,631,967
1879	186,403	1896	120,199	1913	1,427,112	1930	2,757,331
1880	161,213	1897	127,438	1914	1,893,298	1931	2,255,249
1881	214,251	1898	261,195	1915	1,658,182	1932	1,873,006
1882	215,339	1899	255,879	1916	1,307,480	**Total**	**56,552,450**
1883	373,958	1900	434,563	1917	1,181,991		
1884	511,209	1901	444,730	1918	1,211,954		

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[1] Nine months.

[2] Includes expenditures on British Empire Exhibition: 1924, $649,882; 1925, $599,797; 1926, $70,661.

Recent Emigration from Canada.—An important factor tending to offset our immigration activities in the past was a movement from Canada to the United States which attained considerable proportions at certain periods. The quota system of immigration regulation, applied by the United States Government against immigrants generally, but not against the Canadian born, had the effect of limiting immigration to the United States and thereby encouraging Canadians to enter the United States. No record of this movement had ever been kept by the Canadian Government, and, while its seriousness was recognized, its magnitude, as indicated by the United States returns, was questioned on the ground that these returns did not make allowance for Canadians returning to Canada after a more or less extended period of residence in the United States. The Canadian Department of Immigration and Colonization was convinced that a very considerable return movement was taking place, but until 1924 no attempt was made to ascertain the exact magnitude of that movement. In that year immigration officers were instructed to take note of Canadians returning to Canada from the United States after having left Canada to reside in that country. The results are tabulated in Table **18.**

Another circumstance which has in the past occasioned a considerable movement from Canada to the United States has no doubt been the practice of Europeans to enter Canada and declare themselves *bona fide* immigrants, with the real intention of entering the United States as soon as the quota restrictions would permit them to do so. The tightening-up of the American regulations concerning persons entering the United States from Canada and the active co-operation of the Canadian Department of Immigration and Colonization in discouraging this traffic, seem to have effectually met this situation.

Table **18** shows the number of Canadians returned from the United States from April 1, 1924, to Mar. 31, 1932.

18.—Canadians Returned from the United States, fiscal years ended Mar. 31, 1925-32.

Fiscal Year ended Mar. 31—	Canadian-born Citizens.	British Born who had acquired Canadian Domicile.	Naturalized Canadian Citizens.	Total.
1925	36,473	4,487	2,815	43,775
1926	40,246	4,102	2,873	47,221
1927	49,255	5,326	2,376	56,957
1928	35,137	3,280	1,470	39,887
1929	30,008	2,795	995	33,798
1930	26,959	2,030	841	29,830
1931	26,811	2,111	1,287	30,209
1932	17,691	1,069	651	19,411

Official returns indicate that the movement of population between the two countries is now definitely toward Canada. According to the official returns of the United States Government immigration to that country from Canada in the twelve months ended Mar. 31, 1931, amounted to 32,137. Table **2** shows that the movement of immigrants from the United States to Canada in the same period amounted to 24,280, and Table **18** shows a return movement of 30,209 Canadians—a total of

54,489, or a net balance in favour of Canada of 22,352. For our fiscal year ended Mar. 31, 1932, the record is as follows: Emigrants to U.S. (U.S. figure of immigrants), 8,422; immigrants from U.S., 14,297; returning Canadians, 19,411. There was thus a net inward movement of 25,286.

In Table **19** will be found the number of transoceanic passengers entering Canada during the fiscal year ended Mar. 31, 1932, by description and classes, together with totals by classes for the years 1926 to 1931. It will be seen that the fiscal year ended 1930 showed the largest number of transoceanic passengers and the 1932 figures are lower than for any other year of the record.

19.—Returning Canadians and Other Non-Immigrants Entering Canada via Ocean Ports, by Class of Travel, fiscal year ended Mar. 31, 1932, with Totals for fiscal years 1926-31.

NOTE.—Figures in this table cover transoceanic passengers only. Details for 1926 to 1931 will be found in previous editions of the Year Book.

Description.	Transoceanic Passengers.			
	Saloon.	Cabin Class.	Third Class.	Totals.
Canadian born returning	2,086	3,441	5,493	11,020
British born returning	451	1,741	11,471	13,663
British naturalized returning	252	478	1,400	2,130
Alien nationals returning	71	206	2,529	2,806
Non-immigrant tourist	1,372	3,173	4,902	9,447
" professional	5	43	109	157
" student	28	16	31	75
" theatrical	–	85	63	148
" in transit	969	877	278	2,124
" Diplomatic Corps	7	30	9	46
Totals, 1932	**5,241**	**10,090**	**26,285**	**41,616**
Totals, 1931	**5,671**	**14,130**	**29,390**	**49,191**
Totals, 1930	**6,473**	**15,270**	**32,050**	**53,793**
Totals, 1929	**5,372**	**16,127**	**28,879**	**50,378**
Totals, 1928	**5,695**	**17,137**	**25,728**	**48,560**
Totals, 1927	**8,821**	**20,110**	**22,862**	**51,793**
Totals, 1926	**7,646**	**22,460**	**18,900**	**49,006**

Colonization Activities.—Contemporaneously with the sharp reduction in immigration disclosed by preceding tables, due to the policy of limiting immigration in accordance with the requirements of the country, a new and important development has occurred in the form of colonization activities within Canada. It was found that there were in the cities of the Dominion many families and individuals with farm experience who had been attracted to industrial centres in more prosperous times and would now regard with favour the opportunity of an assured subsistence on the land. In many cases families were still in possession of some capital but were in fear of its gradual depletion through unemployment. It was believed that many such families and individuals would return to the land without financial assistance if they could be guided to suitable opportunities. In order to promote such settlement, co-ordination of the activities of the Land Settlement Branch of the Department of Immigration and Colonization and branches of the Canadian National and Canadian Pacific Railways doing similar work was arranged, a committee was organized with representatives of the three interests mentioned, and an active program of land settlement within the Dominion was undertaken. To establish contact with families or individuals desiring to return to the land, a small campaign of classified advertising in the daily press was conducted by the committee. There was no suggestion of financial assistance but there was the offer of dependable and disinterested advice and service in placing such families and individuals in touch with opportunities for farm settlement or farm employment. From Oct. 1, 1930, to Sept. 30, 1932, these activities resulted in the recorded placement in farm employment in Canada of 20,689 single men, and in the settlement on farms of 9,493 families, all of this without any expenditure of public funds in the form of financial assistance to such settlers. On the basis of five persons to the family the total landward movement resulting from these activities represented more than 68,000 persons. In addition to the co-ordinated activities of the two railways and the Department of Immigration and Colonization, several of the provinces carried on effective land settlement movements.

Section 2.—Immigration Policy.

An article prepared by R. J. C. Stead, Director of Publicity, Department of Immigration and Colonization, appeared under this heading in the 1931 edition of the Year Book at pp. 189 to 192 inclusive.

CHAPTER VII.—SURVEY OF PRODUCTION.

The Definition of "Production".—The term "production" is used here in its popular acceptation, *i.e.*, as including such processes as the growing of crops, extraction of minerals, capture of fish, conversion of water power into electrical current, manufacturing, etc.—in economic phrase, the creation of "form utilities". It does not include various activities which are no less "productive" in a broad and strictly economic sense, such as *(a)* transportation, refrigeration, merchandising, etc., which add to commodities already worked up into form the further utilities of "place", "time" and "possession", and *(b)* personal and professional services, such as those of the teacher and the doctor, which are not concerned with commodities at all, but are nevertheless essential to any civilized society—representing, in economic language, the creation of "service utilities".

As showing the importance of these latter activities, it may be pointed out, for comparison with the figures in the accompanying tables, that steam railway gross earnings in 1930, the latest year for which complete statistics of production are available, amounted to $454,231,650, street railway gross earnings to $54,719,259, and telephone and telegraph earnings to $83,685,456, all of which, from a broad point of view, may be considered as "production". It may be further noted that, according to preliminary figures of the census of 1931, out of 3,924,474 persons of ten years of age and over recorded as gainfully occupied, 306,209 were engaged in transportation activities, 386,881 in trade, 92,293 in finance and 766,256 in service occupations. While 81,042 of the latter were engaged in custom and repair work, the value of which is included in the survey of production, the value of the "production" of the remaining 1,470,597 gainfully occupied persons in the four occupational groups just mentioned would not appear to be included to any extent in the survey of production. Then, on the assumption that 1,470,597 gainfully occupied persons whose production is not included in the survey were no less "productive" in the broad sense of the term than the remaining 2,453,877[1] gainfully occupied persons (of whom they amounted to practically 60 p.c.), 60 p.c. should be added to our total net production to arrive at an estimate of the grand total value of the "production" of all gainfully occupied Canadians. Since the net value of production of commodities as stated in the survey was $3,217,000,000 in 1930, the grand total money value of the productive activities of the gainfully occupied population of Canada in the same year may be estimated at 160 p.c. of the above figure or $5,147,000,000 or say $5,150,000,000 in round figures.

The Relation of "Production" to National Income.—The above figures of total production are necessarily larger than the national income, since a considerable deduction must be made therefrom for the purpose of keeping the national capital engaged in production unimpaired, before the remainder can be placed at the disposal of individuals. Machinery that is either obsolete or obsolescent must be replaced, buildings and other equipment kept in a good state of repair, etc. In other words, full and adequate provision must be made out of the year's products for the annual depreciation of the equipment used in their production before any part of that product can be allocated to individuals. On this basis, probably not more than 92 p.c. of the annual value of the productive activities of the Dominion is annually available for consumption as the national income. The national income of the people of Canada in 1930 may therefore be estimated as having been somewhere in the neighborhood of $4,750,000,000.

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[1] This figure includes 169,310 gainfully occupied persons whose industries were not specified but who were mainly general labourers and office clerks. The products of the labour of these persons were probably mainly included in the survey of production but here it is assumed that they were all so included.

(See also entry "National Income" in the index.)

"Gross" and "Net" Production.—The values of products are shown under two headings, namely, "gross" and "net". "Gross" production shows the total value of all the individual commodities produced under a particular heading. "Net" production represents an attempt to eliminate the value of materials consumed in the productive process. For purposes of ordinary economic discussion, the net figures should be used in preference to the gross, because of the large amount of duplication which the latter includes on account of the necessity of making the individual items self-contained. The tables show the total values of all commodities produced in Canada in the latest years; the values are given as in the producers' hands.

Difficulties in Differentiating between the Branches of Production.—There is an increasing demand for a survey of production that will differentiate as between the more important branches and at the same time give a purview of the whole which will be free from overlapping. This is somewhat difficult to present with clearness, in view of the varying definitions that attach to industrial groups from different points of view. For example, brick, tile and cement are frequently included in "mineral production" as being the first finished products of commercial value resulting from the productive process; frequently, however, they are regarded as "manufactures" in view of the nature of the productive process—either allocation being correct according to the point of view. In the summing up, production in such industries is regarded as primary production and a total for other manufacturing industries is given under the description "manufactures, *n.e.s.*"

Interpretation of Items.—The primary industries of agriculture, fishing, forestry, mining, etc., are separated in this statement from the secondary or manufacturing processes. The close association between the two and the overlappings that are apt to occur have already been pointed out. As further explaining the procedure that has been followed in drawing up the tables, the following notes are appended:—

Agriculture.—Dairy factories are included under this heading; farm dairy products (gross) include the milk consumed whole and sold to dairy factories, and the butter, etc., made on the farm.

Forestry.—Forestry production is understood to consist of the operations in the woods as well as those of sawmills and pulp-mills, the latter being limited to the making of first products such as lumber, lath, shingles, pulp and cooperage stock.

Fur Production.—The item of fur production is limited to the wild-life production. To obtain a total of the peltries produced in Canada, it would be necessary to add to the wild-life output the production of pelts on fur farms, which is included in the total for "agriculture".

Mineral Production.—Under mineral production many items are included that are also allocated to "manufactures". Considerable overlapping exists as between "mineral production" on the one hand and "manufactures" on the other. The Bureau presents the detailed statistics of these groups (the chief of which are smelters, brick, cement, lime, etc.) in its reports on mineral production, since their product is the first to which a commercial value is ordinarily assigned.

Total Manufactures.—The figure given for this heading is a comprehensive one including the several items listed with the extractive industries above, though also frequently regarded as "manufactures", *viz.*, dairy factories, fish-canning and curing, sawmills, pulp-mills, shipbuilding and certain mineral industries. This duplication is eliminated from the grand totals as well as from "manufactures, *n.e.s.*", listed in Table **5**.

Manufactures, n.e.s.—The figures given for manufactures, *n.e.s.*, are exclusive of the value of the products of all manufacturing processes closely associated with the extractive industries that are frequently included under this heading; hence it is obvious that the grand total is equivalent to an amount obtained by adding the values for manufactures, *n.e.s.*, and for the other eight divisions.

Section 1.—The Leading Branches of Production in 1930.

The total net value of production, as estimated for 1930 by the Dominion Bureau of Statistics, on the basis of statistics compiled by its various branches, was $3,216,700,000. This was less than for any year since 1924. Decreases were shown in every branch of production except the electric power industry and were especially heavy for agriculture, trapping and construction work. Farm yields were slightly above normal in 1930 but the average price of farm products was less than in any year in the two preceding decades. The resulting values of farm crops produced in 1930 were less than in any year since 1914.

Manufacturing plants operated at a comparatively high level of capacity during the first half of the year, but there was a pronounced decline later. The value added by the manufacturing process showed a decline of nearly 12 p.c. from the 1929 level.

Total production was 18 p.c. less than in 1929, 22 p.c. less than in 1928, 17 p.c. less than in 1927, nearly 12 p.c. less than in 1926, 4 p.c. less than in 1925 and 6 p.c. greater than in 1924.

The Main Branches of Production in 1930.—Confining our analysis to the net production of commodities, "net" production signifying the value left in the producers' hands after the elimination of the value of the materials consumed in the production process, it is noteworthy that, as already pointed out, electric power, alone of the nine branches of production, showed increased production in 1930. The reason lay chiefly in the many projects already planned or begun which were being carried to completion. These included the Beauharnois project and the Rapide Blanc development on the Upper St. Maurice river, in Quebec; the Abitibi Canyon project and the Chats Falls development, in Ontario; the Seven Sisters development in Manitoba; and the Stave River project in British Columbia. The decline in agricultural production, after deducting the cost of materials such as seed, feed and nursery stock, was 26·6 p.c. Forestry, comprising woods operations and the value added by the manufacturing process in the sawmilling and pulp industries, showed a drop of 10·2 p.c., while mineral production at $279,873,000 showed a decline of 10 p.c. The revenues of the fisheries and of trapping showed declines of 10·7 p.c. and 39·6 p.c., respectively.

Among the branches of secondary production, construction showed the heaviest proportional decline of 23·2 p.c. Custom and repair production was down by 14·5 p.c. compared with 1929 and manufactures was reduced by 11·8 p.c.

Relative Importance of the Several Branches of Production.—Owing to the more rapid decline in agricultural revenue in 1930, the lead of manufactures over agriculture, which was 93 p.c. in 1929, increased to 132·2 p.c. in 1930. Agricultural production in 1930 represented 23·6 p.c. of the net output of all branches, while the total value added by the manufacturing processes was 54·8 p.c. of the total net production. However, a number of industries listed under manufactures are also included in the several extractive industries with which they are associated. Eliminating this duplication, the output of the manufacturing industries not elsewhere included was 40·7 p.c. of the total net production. Forestry held third place in 1930 with a percentage of 9·4. Construction was in fourth place, with a percentage of 9·2, followed by mining, with a percentage of 8·7; in 1929 mining represented 7·9 p.c. and forestry 8·6 p.c. The electric power group in 1930 had an output of 3·9 p.c. of the total net production. Repair work, fisheries and trapping followed with percentages in 1930 of 2·7, 1·5 and 0·3, respectively.

A summary of gross and net production is given by industries for the years from 1926 to 1930 in Table **1**; a detailed itemized statement of the net value of production in 1928, 1929 and 1930, is given in Table **2**.

1.—Gross and Net Values of Production in Canada, by Industries, 1926-30.

GROSS VALUES OF PRODUCTION.

Division of Industry.	1926.	1927.	1928.	1929.	1930.
	$	$	$	$	$
Agriculture[1]	1,806,075,911	1,917,999,084	1,905,311,580	1,729,821,129	1,346,363,659
Forestry	454,773,119	453,694,831	473,559,767	495,592,847	440,352,351
Fisheries	73,052,985	63,876,559	70,668,167	70,580,223	63,743,353
Trapping	17,609,036	17,640,781	16,603,827	16,356,447	9,875,955
Mining	279,674,780	279,873,382	308,250,712	352,266,692	325,184,050
Electric power	115,467,940	134,818,567	143,692,455	157,499,385	164,833,913
Totals, Primary Production	2,746,653,771	2,867,903,204	2,918,086,508	2,822,116,723	2,350,353,281
Construction	385,913,533	435,359,000	488,378,000	594,144,825	456,995,000
Custom and repair[2]	107,367,900	116,082,000	129,085,000	143,877,000	123,000,000
Manufactures[3]	3,247,803,438	3,425,498,540	3,769,850,364	4,063,987,279	3,428,970,628
Totals, Secondary Production	3,741,084,871	3,976,939,540	4,387,313,364	4,802,009,104	4,008,965,628
Grand Totals	**5,837,369,237**	**6,167,384,194**	**6,574,619,365**	**6,846,171,400**	**5,601,880,583**

NET VALUES OF PRODUCTION.

Division of Industry.	1926.	1927.	1928.	1929.	1930.	P.c. of Net Value of Production, 1930.
	$	$	$	$	$	p.c.
Agriculture	1,400,244,658	1,522,948,870	1,501,271,463	1,034,129,824	758,791,743	23·59
Forestry	312,844,584	311,915,163	323,654,008	337,649,078	303,145,169	9·42
Fisheries	56,360,633	49,497,038	55,050,973	53,518,521	47,804,216	1·49
Trapping	17,609,036	17,640,781	16,603,827	16,356,447	9,875,955	0·31
Mining	240,437,123	247,356,695	274,989,487	310,850,246	279,873,578	8·70
Electric power	88,933,733	104,033,297	112,326,819	122,883,446	126,038,145	3·92
Totals, Primary Production	2,116,429,767	2,253,391,844	2,283,896,577	1,875,387,562	1,525,528,806	47·43
Construction	251,088,323	283,263,000	319,164,000	386,709,398	297,046,750	9·23
Custom and repair[2]	68,743,000	74,174,000	82,482,000	99,618,000	85,200,000	2·65
Manufactures[3]	1,519,179,246[5]	1,635,923,936	1,819,046,025	1,997,350,365	1,761,986,726	54·77[4]
Totals, Secondary Production	1,839,010,569	1,993,360,936	2,220,692,025	2,483,677,763	2,144,233,476	66·65[4]
Grand Totals	**3,640,356,606**	**3,901,505,298**	**4,122,509,882**	**3,946,609,211**	**3,216,746,735**	**100·00**

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[1] The gross value of agricultural production here exceeds that given in Chapter VIII, Agricultural Statistics, of this edition of the Year Book, by the amount paid to patrons of dairy factories for milk and cream.

[2] Statistics of custom and repair industries were not collected after 1922, and the totals for that year were repeated in 1923 and 1924. The totals for 1926 to 1930 were estimated according to the percentage change in the data for manufacturing.

[3] The item "manufactures" includes dairy factories, sawmills, pulp-mills, fish-canning and curing, shipbuilding, electric power and certain mineral industries also included under other headings. This duplication, amounting in 1926 to a gross of $650,369,405 and a net of $315,083,730, in 1927 to a gross of $677,458,550 and a net of $345,247,482, in 1928 to a gross of $730,780,507 and a net of $382,078,720, in 1929 to a gross of $777,954,427 and a net of $412,456,114 and in 1930 to a gross of $757,438,326 and a net of $453,015,547 is eliminated from the grand totals.

[4] The proportion of manufactures, freed from all duplication (as explained in note 3) to the grand total of net production was 40·69 p.c., and under like conditions the proportion of all secondary production to the grand total of net production was 52·57 p.c.

[5] This figure exceeds by $26,534,207 that given in the Manufactures chapter as the net production of manufactures in 1926. This difference is due to certain duplications in the central electric station industry not having been eliminated when the 1926 figures were first compiled.

2.—Detailed Itemized Statement of the Net Values of Production in Canada during 1928, 1929 and 1930.

Classification.	Net Production.		
	1928.	1929.	1930.
	$	$	$
PRIMARY PRODUCTION.			
Agriculture—Field Husbandry—			
Field crops	1,053,817,000	794,783,000	514,041,000
Fruits and vegetables	48,400,463	46,100,824	40,405,743
Maple products	5,583,000	6,119,000	5,251,000
Tobacco	6,834,000	6,276,000	7,058,000
Grass and clover seed	2,957,000	2,123,000	2,482,000
Honey	3,015,000	2,849,000	2,584,000
Flax fibre	509,000	393,000	371,000
Totals, Field Husbandry	1,121,115,463	858,643,824	572,192,743
Animal Husbandry—			
Farm animals	197,880,000	207,317,000	166,630,000
Wool	5,099,000	4,470,000	2,311,000
Dairy products—			
Dairy butter	29,103,000	28,929,000	20,710,000
Creamery butter	64,703,000	65,930,000	56,670,000
Home made cheese	82,000	83,000	64,000
Factory cheese	30,494,000	21,471,000	18,090,000
Miscellaneous factory products	20,581,000	22,092,000	21,305,000
Milk consumed fresh or otherwise used[1]	148,082,000	153,238,000	155,619,000
Poultry and eggs	106,653,000	107,664,000	95,227,000
Fur farming—			
Pelts	2,346,000	2,316,000	3,096,000
Animals	3,760,000	4,475,000	1,829,000
Totals, Animal Husbandry [2]	380,156,000	175,486,000	186,599,000
Totals, Agricultural Production	1,501,271,463	1,034,129,824	758,791,743
Forestry—			
Logs and bolts	76,431,481	79,278,543	75,563,041
Pulpwood	74,848,077	76,120,063	67,529,612
Railway ties	5,871,724	5,730,423	5,038,899
All other forest products	55,799,517	58,441,100	58,721,942
Totals, Forestry Operations	212,950,799	219,570,129	206,853,494
Sawmill products	58,972,953	63,245,612	48,186,223
Pulp-mill products	51,730,256	54,833,337	48,105,452
Totals, Milling Operations	110,703,209	118,078,949	96,291,675
Totals, Forestry Production	323,654,008	337,649,078	303,145,169
Fisheries—			
Fish sold fresh by fishermen	18,131,309	16,637,841	13,823,526
Sales to canning and curing establishments	15,617,194	17,061,702	15,939,137
Fish domestically cured	651,932	1,914,420	1,007,382
Fish-canning and curing establishments (values added)	20,650,538	17,904,558	17,034,171
Totals, Fisheries Production	55,050,973	53,518,521	47,804,216
Trapping—			
Fur Production (wild life)	16,603,827	16,356,447	9,875,955
Mineral Production—			
Smelting	61,081,477	68,438,022	55,635,664
Other metallics	70,930,977	86,016,034	87,108,100
Fuels	74,413,160	76,787,397	68,184,485
Salt	1,495,971	1,578,086	1,694,631
Other non-metallics	17,330,721	19,495,873	13,523,233
Clay products	12,381,718	13,904,643	10,593,678
Cement	16,739,163	19,337,235	17,713,067
Lime	4,534,568	5,908,610	4,038,698
Other structural materials	16,081,732	19,384,346	21,382,122
Totals, Mineral Production	274,989,487	310,850,246	279,873,578
Electric Light and Power[3]	112,326,819	122,883,446	126,038,145
Totals, Primary Products	2,283,896,577	1,875,387,562	1.525,528,806

[1] Three per cent for wastage was deducted from value of milk consumed fresh.
[2] Cost of feed is deducted from the gross for animal husbandry.
[3] This item is exclusive of duplication involved in purchases of power by reporting companies.

2.—Detailed Itemized Statement of the Net Values of Production in Canada during 1928, 1929 and 1930—concluded.

Classification.	Net Production.		
	1928.	1929.	1930.
SECONDARY PRODUCTION.	$	$	$
Construction—			
General construction	306,821,000	374,823,670	297,046,750
Shipbuilding	12,343,000	11,885,728	–
Totals, Construction	319,164,000	386,709,398	297,046,750
Custom and repair	82,482,000	99,618,000	85,200,000
Manufactures—			
Vegetable products	317,073,457	344,437,941	314,513,326
Animal products	133,697,496	132,409,973	132,212,467
Textiles	191,671,848	205,943,337	177,250,868
Wood and paper	389,389,952	411,616,451	368,350,618
Iron and steel	300,014,925	353,087,320	288,032,111
Non-ferrous metals	139,220,908	158,645,034	138,720,310
Non-metallic minerals	112,398,268	124,874,388	109,606,153
Chemicals	72,812,503	83,360,884	71,804,599
Miscellaneous, including central electric stations	162,766,668	182,975,037	161,496,274
Totals, Manufactures[1]	1,819,046,025	1,997,350,365	1,761,986,726
Totals, Secondary Production	2,220,692,025	2,483,677,763	2,144,233,476
Grand Totals	**4,122,509,882**	**3,946,609,211**	**3,216,746,735**

[1] The item "total manufactures" includes the following industries which are also shown under other heads, the amount of the duplication being deducted from the grand totals:—

	$	$	$
Dairy factories	34,783,938	36,971,994	43,541,731
Sawmills and pulp-mills	110,703,209	118,078,949	181,868,214
Fish-canning and curing	15,688,965	13,469,401	11,891,819
Shipbuilding	12,342,892	11,885,728	–
Mineral industries	96,232,897	109,166,596	89,675,638
Electric power	112,326,819	122,883,446	126,038,145
Totals	382,078,720	412,456,114	453,015,547
Totals, Manufactures (duplications eliminated)	1,436,967,305	1,584,894,251	1,308,971,179

Section 2.—The Provincial Distribution of Production.

The trend of net production has exhibited considerable variation in the different provinces. In Prince Edward Island, the lowest point was reached in 1922, followed by substantial recovery from 1924 to 1926, with a pronounced decline in 1927 and moderate fluctuations until 1930 when a further pronounced decline was recorded. The depression in Nova Scotia was maintained from 1920 to 1925 but net production in 1926 showed a marked reversal of the trend in preceding years. For 1928 a record level of $144,000,000 was attained. For 1929 this was reduced to $129,000,000 and for 1930 to $114,000,000. The trend in New Brunswick showed increases in 1925 and 1926, followed by a recession extending to 1930 with the exception of 1929.

In Quebec the decline in 1921 was very severe. During the subsequent period the chief features were a substantial gain in 1923, a minor recession in 1924, and a marked recovery in 1925 continued in 1926, 1927, 1928 and 1929. The total in 1930 was $892,000,000 compared with $1,049,500,000 in the preceding year, a decline of 15 p.c. The decline of 1921 was also very severe in Ontario, but since that year continuous increases have been recorded with the exception of 1930 when a decline of 16·8 p.c. from the 1929 level was recorded.

The special feature in the case of Manitoba was the marked increase in 1924 over 1923. There were substantial increases in 1926 and 1928, when the maximum production of $235,000,000 was reached. The decrease since 1928 has been most pronounced. The 1929 and the 1930 figures are the lowest since 1923. For Saskatchewan, a decline was shown in 1921, but the total of 1920 was exceeded in 1922 and again in 1925. There was a temporary decline in 1926, followed by a good recovery during the next two years. The 1929 figure, however, reached approximately the 1924 level and the 1930 figure was the lowest recorded since the study was commenced in 1921. High points in the net value of production in Alberta were attained in 1923 and 1927, since when there has been a rather rapid decline, the 1930 level approximating that of 1922. In British Columbia, steady increases were shown during the recovery from 1922 to 1926, the upward trend being fairly continuous to 1929. For 1930, a decline of nearly 19 p.c. was shown from the preceding year.

The values of gross and net production are given by provinces for the years 1926 to 1930 in Table **3**.

3.—Gross and Net Values of Production in Canada, by Provinces, 1926-30.

GROSS VALUES OF PRODUCTION.

Province.	1926.	1927.	1928.	1929.	1930.
	$	$	$	$	$
Prince Edward Island	32,028,754	25,590,162	28,925,960	32,807,542	25,436,519
Nova Scotia	170,611,631	169,539,287	204,211,630	199,016,575	174,266,197
New Brunswick	141,860,549	135,971,623	132,957,699	141,493,983	127,022,481
Quebec	1,436,435,438	1,513,389,889	1,612,448,740	1,770,707,067	1,500,303,451
Ontario	2,472,666,468	2,619,513,041	2,813,092,274	2,999,318,714	2,450,173,078
Manitoba	311,220,571	311,515,657	355,009,130	342,731,190	273,174,256
Saskatchewan	435,783,731	483,638,832	502,850,308	432,316,508	296,156,731
Alberta	383,207,517	462,347,821	439,513,402	409,642,138	329,898,695
British Columbia	447,965,982	436,638,318	480,127,529	512,628,119	420,984,045
Yukon	5,588,596	5,239,564	5,482,693	5,509,564	4,465,130
Canada	**5,837,369,237**	**6,167,384,194**	**6,574,619,365**	**6,846,171,400**	**5,601,880,583**

NET VALUES OF PRODUCTION.

Province.	1926.	1927.	1928.	1929.	1930.	Percentage of Total Net Value in 1930.
	$	$	$	$	$	p.c.
P. E. Island	26,325,625	23,734,082	23,128,829	23,452,390	16,635,118	0·52
Nova Scotia	124,218,480	119,540,211	144,272,367	129,380,194	114,402,720	3·56
New Brunswick	90,964,915	86,871,419	85,364,983	87,382,143	78,772,589	2·45
Quebec	869,594,363	920,270,084	979,666,796	1,049,515,828	892,076,349	27·73
Ontario	1,371,688,666	1,469,994,588	1,572,835,443	1,658,395,781	1,380,458,865	42·91
Manitoba	207,100,745	200,050,712	235,182,568	185,231,376	142,170,105	4·42
Saskatchewan	357,046,765	406,098,995	413,825,134	238,781,959	134,134,319	4·17
Alberta	298,026,980	378,578,571	341,413,575	237,493,962	184,659,449	5·74
British Columbia	289,801,471	291,140,286	321,354,242	331,466,014	268,972,091	8·36
Yukon	5,588,596	5,226,350	5,465,945	5,509,564	4,465,130	0·14
Canada	**3,640,356,606**	**3,901,505,298**	**4,122,509,882**	**3,946,609,211**	**3,216,746,735**	**100·00**

Relative Production in Different Provinces, 1930.—It will be seen from Table 3 that Ontario and Quebec held first and second places among the provinces in the net value of production in 1930. The percentage of production of each of these provinces to the total was higher than in 1929, when the net output in the two provinces represented 42·0 p.c. and 26·6 p.c. of the totals respectively. Third place in 1930, as in 1929, definitely goes to British Columbia with 8·4 p.c. of the total. Alberta and Manitoba are fourth and fifth respectively, replacing Saskatchewan and Alberta from these positions as in 1929. In 1930 Saskatchewan was in sixth place, followed by Nova Scotia, New Brunswick and Prince Edward Island in the order named.

Section 3.—Leading Branches of Production in each Province, 1930.

The Maritime Provinces.—Production in *Nova Scotia* in 1930 was principally in the manufacturing, mining, agricultural and fisheries industries, which were accountable for 36·1 p.c., 23·6 p.c., 22·5 p.c., and 9·1 p.c., respectively, of the net output of the province; the contribution of manufactures, aside from processes carried on in connection with the extractive industries, was 25·0 p.c. In *New Brunswick* manufacturing also took first place as a producer of new wealth, the proportion being 37·5 p.c. Agriculture was second with 29·8 p.c. and forestry a close third. If the manufacturing group be limited to exclude processes carried on in connection with the extractive industries, then it ranked third after agriculture and forestry. Agriculture including fur farming contributed 76·8 p.c. of the net output of *Prince Edward Island.* In the Maritime Provinces as a whole, the value of production was 12 p.c. less than in the preceding year. The generation of electrical energy and trapping industries alone showed gains in 1930.

Quebec.—The product derived from manufactures in Quebec was greater than that from any other industry. Manufactures, aside from the output of establishments associated with the extractive industries, contributed 45·2 p.c., while the net output of the entire manufacturing division, referred to the same base, was 62·8 p.c. Agriculture with 19·4 p.c., forestry with 12·4 p.c., and construction with 11·3 p.c., occupied second, third and fourth places. The increases over 1929 in forestry and in the generation of electrical energy were 5·1 p.c. and 3·5 p.c., respectively.

Ontario.—The net production from the manufactures of Ontario, when stripped of all duplication, was $708,000,000 or 51·3 p.c. of the total, compared with $278,000,000 or 20·2 p.c. from agriculture. Construction held third place with 8·3 p.c. of the total, and mining followed with 8·2 p.c. The forestry output was 5·4 p.c. of the net production of the province. Decreases from 1929 were shown in all the main divisions of production. The net output of manufactures decreased by $146,600,000, while agriculture showed a decline of $61,900,000 or 18·2 p.c. Except in forestry and fisheries, Ontario led the other provinces in the productiveness of the main branches of industry. The province yielded precedence in forestry operations to Quebec alone, while British Columbia, Nova Scotia and New Brunswick obtained a greater income than Ontario did from fisheries. About 49·7 p.c. of the net manufacturing output of the country was contributed by Ontario and 36·7 p.c. of the agricultural income was derived from the same province.

The Prairie Provinces.—About 57·9 p.c. of the output of *Saskatchewan* was obtained from farming, which industry was also a predominant producer of new wealth in *Manitoba* and *Alberta*, the proportions being 32·8 p.c. and 46·9 p.c., respectively. Mineral production, chiefly coal mining, held second place in *Alberta*, with an output of 16·6 p.c. of the provincial total. Manufacturing was first in importance in *Manitoba*, representing 36·9 p.c. of the value of the net output. Moderate grain yields and lower prices accounted mainly for the decreases in the net production of the three Prairie Provinces. In *Manitoba*, mining and electric power showed gains in 1930 over the preceding year. The forestry, mining and electric power industries of *Saskatchewan* showed gains in 1930, and the net revenue from the electric power industry of *Alberta* was somewhat greater.

British Columbia.—The net production from manufacturing in British Columbia during 1930 was about $118,000,000, but more than half of this amount was derived from manufacturing processes closely associated with the primary industries, especially logging and fishing. The remainder, $50,911,000, was 18·9 p.c. of the net output of the province. Aside from manufacturing, forestry constituted the chief source of new wealth, about 24·0 p.c. of the total output of the province being contributed by the forest. Mining and farming followed in order, with percentages of 20·4 and 12·8, respectively.

Details showing the gross and net values of production, by industries, in the various provinces in 1930, together with percentages, are given in Tables **4** and **5**.

4.—Gross and Net Values of Production in Canada, by Industries and Provinces, 1930.

Note.—For Dominion totals, see Tables **1** and **2**.

GROSS PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Agriculture	19,297,309	39,560,941	35,190,057	281,431,653	457,303,511
Forestry	663,509	14,415,051	32,822,655	166,546,082	109,559,985
Fisheries	1,682,893	14,928,394	5,954,336	2,927,479	3,294,629
Trapping	2,896	382,975	105,670	1,245,461	2,525,100
Mining	–	27,019,367	2,191,425	49,889,093	133,420,863
Electric power	227,703	4,432,899	3,481,718	49,384,701	74,365,018
Construction	1,120,000	7,238,000	11,067,000	154,672,000	175,459,000
Custom and repair	221,000	3,875,000	1,524,000	21,745,000	52,245,000
Manufactures[1]	4,254,966	85,802,921	63,468,262	1,022,280,687	1,713,025,322
Totals	**25,436,519**	**174,266,197**	**127,022,481**	**1,500,303,451**	**2,450,173,078**

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
	$	$	$	$	$
Agriculture	95,891,602	194,549,365	169,512,008	53,627,213	–
Forestry	8,171,589	6,120,585	8,287,448	93,765,447	–
Fisheries	1,811,962	234,501	421,258	32,458,391	29,510
Trapping	668,869	1,259,837	999,216	771,899	1,914,032[2]
Mining	6,041,628	2,368,612	30,619,888	71,111,586	2,521,588
Electric power	7,715,253	5,470,623	5,540,498	14,215,500	–
Construction	22,010,000	27,361,000	25,081,000	32,987,000	–
Custom and repair	11,700,000	9,680,000	10,700,000	11,210,000	–
Manufactures[1]	142,424,990	62,276,766	94,314,782	241,121,932	–
Totals	**273,174,256**	**296,156,731**	**329,898,695**	**420,984,045**	**4,465,130**

For footnotes, see end of Table 4, p. 213.

4.—Gross and Net Values of Production in Canada, by Industries and Provinces, 1930—concluded.

NET PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Agriculture	12,776,369	25,744,584	23,480,377	173,275,448	278,408,706
Forestry	584,142	11,134,268	21,965,180	110,779,636	74,954,317
Fisheries	1,141,279	10,411,202	4,853,575	2,502,998	3,294,629
Trapping	2,896	382,975	105,670	1,245,461	2,525,100
Mining	–	27,019,367	2,191,425	41,215,220	113,530,976
Electric power	227,177	3,675,905	2,806,573	43,201,265	49,371,901
Construction	728,000	4,704,700	7,193,550	100,536,800	114,048,350
Custom and repair	150,000	2,718,000	1,250,000	15,986,000	36,036,000
Manufactures[1]	1,708,139	41,296,743	29,570,998	560,036,409	876,358,542
Totals	**16,635,118**	**114,402,720**	**78,772,589**	**892,076,349**	**1,380,458,865**

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
	$	$	$	$	$
Agriculture	46,677,055	77,595,270	86,509,813	34,324,121	–
Forestry	6,325,510	5,686,423	7,186,473	64,529,220	–
Fisheries	1,811,962	234,501	421,258	23,103,302	29,510
Trapping	668,869	1,259,837	999,216	771,899	1,914,032[2]
Mining	5,453,182	2,368,612	30,619,888	54,953,320	2,521,588
Electric power	6,574,463	4,711,212	4,651,870	10,817,779	–
Construction	14,306,500	17,784,650	16,302,650	21,441,550	–
Custom and repair	7,860,000	6,090,000	6,990,000	8,120,000	–
Manufactures[1]	67,663,725	26,668,609	40,692,898	117,990,663	–
Totals	**142,170,105**	**134,134,319**	**184,659,449**	**268,972,091**	**4,465,130**

[1] The figures for "manufactures" involve duplicated amounts which were deducted in computing the totals for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. Shipbuilding for example was included under both "construction" and "manufacturing" up to 1929 (see footnote 1, Table 2). The following statement gives the amount of the duplication by provinces: Prince Edward Island, gross, $2,033,757, net $682,884; Nova Scotia, gross $23,389,351, net $12,685,024; New Brunswick, gross $28,782,642, net $14,644,759; Quebec, gross $249,818,705, net $156,702,888; Ontario, gross $271,025,350, net $168,069,656; Manitoba, gross $23,261,637; net $15,171,161; Saskatchewan, gross $13,164,558, net $8,264,795; Alberta, gross $15,577,403, net $9,714,617; British Columbia, gross $130, 384,923, net $67,079,763.

[2] Includes the trapping industry of the Northwest Territories.

5.—Percentage of the Value of the Net Production in each Industry to the Total Net Production of each Province, 1930.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	76·80	22·50	29·81	19·42	20·17
Forestry	3·51	9·73	27·88	12·42	5·43
Fisheries	6·86	9·10	6·16	0·28	0·24
Trapping	0·02	0·33	0·13	0·14	0·18
Mining	–	23·62	2·78	4·62	8·22
Electric power	1·37	3·21	3·56	4·84	3·58
Construction	4·38	4·11	9·13	11·27	8·26
Custom and repair	0·90	2·39	1·59	1·79	2·61
Manufactures, n.e.s	6·16	25·01	18·96	45·22	51·31
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**
Totals, Manufactures (Percentages to Grand Totals of Net Production)	10·27	36·10	37·54	62·78	63·48

5.—Percentage of the Value of the Net Production in each Industry to the Total Net Production of each Province, 1930—concluded.

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Canada.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	32·83	57·85	46·85	12·76	–	23·59
Forestry	4·45	4·24	3·89	23·99	–	9·42
Fisheries	1·27	0·17	0·23	8·59	0·66	1·49
Trapping	0·47	0·94	0·54	0·29	42·87[1]	0·31
Mining	3·84	1·77	16·58	20·43	56·47	8·70
Electric power	4·62	3·51	2·52	4·02	–	3·92
Construction	10·06	13·26	8·83	7·97	–	9·23
Custom and repair	5·53	4·54	3·78	3·02	–	2·65
Manufactures, n.e.s.	36·93	13·72	16·78	18·93	–	40·69
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**
Totals, Manufactures (Percentages to Grand Totals of Net Production)	47·59	19·88	22·04	43·87	–	54·77

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[1] Includes the trapping industry of the Northwest Territories.

CHAPTER VIII.—AGRICULTURE.

Agriculture, including stock raising and horticulture, is the chief single industry of the Canadian people, employing, in 1931, 28·7 p.c. of the total gainfully occupied population and 33·9 p.c. or over one-third of the gainfully occupied males. In addition, it provides the raw material for many Canadian manufactures, and its products in raw or manufactured form constitute a very large percentage of Canadian exports. For a statement of the occupied and the available agricultural lands in Canada, see p. 39 of this volume.

This chapter of the present volume contains a statement of current governmental activities in connection with agriculture, including those of the Dominion and Provincial Experimental Stations. This is followed by statistics of agriculture, including agricultural revenue and wealth, field crops, farm live stock and poultry, fur farming, dairying, fruit, special crops, farm labour and wages, prices, miscellaneous, and, since Canadian exports of agricultural commodities are sold in the world market, a review of world statistics of agriculture, compiled from the publications of the International Institute of Agriculture.

The Canada Year Book, 1924, contained, on pages 186 to 191, an article on the "Development of Agriculture in Canada", by Dr. J. H. Grisdale, Deputy Minister, Department of Agriculture, Ottawa. To this the interested reader is referred.

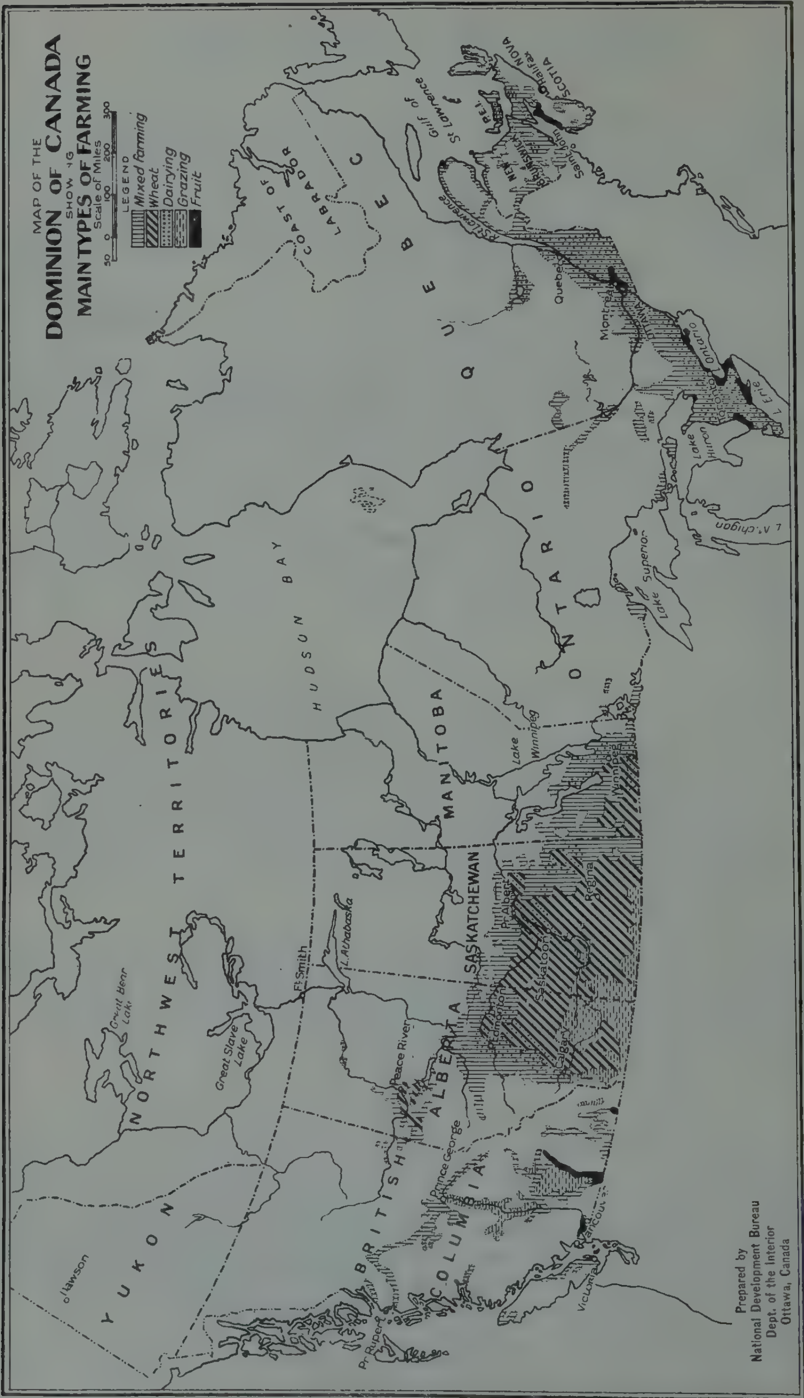
Section 1.—The Government in Relation to Agriculture.

It is provided in section 95 of the British North America Act that "in each province the Legislature may make laws in relation to agriculture in the province"; it is also "declared that the Parliament of Canada may from time to time make laws in relation to agriculture in all or any of the provinces; and any law of the Legislature of a province relative to agriculture . . . shall have effect in and for the province as long and as far only as it is not repugnant to any Act of the Parliament of Canada".

As a result of this provision, there exist at the present time Departments of Agriculture, with Ministers of Agriculture at their heads, both in the Dominion and in each of the nine provinces, though in most provinces the portfolio of agriculture is combined with one or more other portfolios in the hands of a single Minister. A short sketch of the functions of the various Departments follows.

Subsection 1.—The Dominion Department of Agriculture.

The Dominion Department of Agriculture was constituted in 1868 under authority of 31 Vict., c. 53, with numerous functions that were by no means purely agricultural, including: (1) agriculture; (2) immigration and emigration; (3) public health and quarantine; (4) the marine and immigrant hospital at Quebec; (5) arts and manufactures; (6) the census, statistics and the registration of statistics; (7) patents of invention; (8) copyright; (9) industrial designs and trade marks.


MAP OF THE
DOMINION OF CANADA
SHOWING
MAIN TYPES OF FARMING
Scale of Miles
50 0 100 200 300
LEGEND
Mixed Farming
Wheat
Dairying
Grazing
Fruit
YUKON
NORTHWEST TERRITORIES
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
COAST OF LABRADOR
NEW BRUNSWICK
NOVA SCOTIA
P.E.I.
HUDSON BAY
Dawson
Great Bear Lake
Great Slave Lake
Ft. Smith
L. Athabaska
Peace River
Prince George
Pr. Rupert
Vancouver
Victoria
Edmonton
Calgary
Saskatoon
Pr. Albert
Regina
Lake Winnipeg
Winnipeg
Lake Superior
L. Michigan
Lake Huron
L. Erie
Toronto
Ontario
Ottawa
Montreal
Quebec
St. Lawrence
Gulf of St. Lawrence
St. John
Halifax
Prepared by
National Development Bureau
Dept. of the Interior
Ottawa, Canada

MAIN TYPES OF FARMING IN CANADA

In the course of time the purely agricultural work of the Department came to demand greater attention; the non-agricultural functions were one by one entrusted to other Departments of the Government, while specialization became the order of the day within the Department of Agriculture itself. At the present time it includes the following branches: (1) Experimental Farms; (2) Dairy and Cold Storage; (3) Health of Animals; (4) Live Stock; (5) Seed; (6) Entomological; (7) Fruit; (8) Publications; (9) Agricultural Economics.

For the Acts of Parliament administered by the Dominion Department of Agriculture, see in the index "Acts of Parliament administered by Dominion Government Departments". For the publications of the Department, covering a wide field of information, see in the index the entry "Publications of Dominion Departments".

Subsection 2.—Provincial Departments of Agriculture.[1]

Prince Edward Island.—The Department of Agriculture is presided over by a Minister, and the staff consists of a Deputy Minister, a Live Stock Superintendent, a Superintendent of Women's Institutes and a Dairy Superintendent. Assistance is given in co-operative marketing, promoting the live-stock industry and encouraging exhibitions, the formation of boys' and girls' clubs and the welfare of agriculture generally.

Nova Scotia.—Agriculture in the province of Nova Scotia is administered by the Department of Agriculture. The Department is divided into the following main divisions: (1) administration, (2) agricultural college, (3) demonstration farm, (4) demonstration poultry plant, (5) poultry, (6) government creameries, (7) dairying, (8) horticulture, (9) apiculture, (10) live stock, (11) entomology, (12) botany, (13) soils and fertilizers, (14) agricultural associations and societies, (15) exhibitions, (16) extension service, (17) women's institutes, (18) field crops, (19) marketing.

New Brunswick.—The branches of the Department of Agriculture of New Brunswick are as follows: (1) industry, immigration and farm settlement, (2) elementary agricultural education, (3) agricultural societies and live stock, (4) dairying, (5) horticulture, (6) soils and crops, (7) poultry, (8) bee-keeping, (9) women's institutes, (10) agricultural representatives.

Quebec.—The Quebec Department of Agriculture comprises a certain number of branches and sections as follows: *Agricultural Economics Branch*, including the following sections: publicity; co-operation, markets and statistics; demonstration farms; agricultural surveys; field husbandry; drainage; home economics; bee-keeping and sugar making; agricultural societies. *Live Stock Branch*, including the following sections: dairy; veterinary; swine; sheep; horses; poultry; farm buildings. *Horticulture Branch*, including the following sections: fruit growing; truck crops; vegetable canning; flower growing; phytopathology; entomology; botany. *Agricultural Representatives Branch:* 82 agricultural representatives' offices are now established in rural counties of Quebec and are under the supervision of 6 inspectors. The above organizations are all under one General Director of Branches.

There are other activities which are not included in the above organization, such as: agricultural education; agricultural merit competition; provincial dairy school.

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[1] For publications of provincial Departments of Agriculture, see in the index the entry "Publications of Provincial Governments".

Ontario.—The Ontario Department of Agriculture includes the following branches: agricultural and horticultural societies, live stock, institutes, dairy, fruit, crops, co-operation and markets, statistics and publications, agricultural representatives, colonization and immigration, Agricultural Development Board and the Ontario Marketing Board. The Department is responsible for the administration of the Ontario Agricultural College, the Ontario Veterinary College, the Kemptville Agricultural School, the experimental farms at Guelph, Ridgetown and Vineland, and the demonstration farms at New Liskeard and Hearst.

Manitoba.—The Manitoba Department of Agriculture includes an agricultural extension service, a dairy branch, a publications and statistics branch, a live-stock branch, a registrar of co-operative associations, and a weeds branch. It also conducts the Manitoba branch of the Employment Service of Canada.

Saskatchewan.—The work of the Department of Agriculture is chiefly administrative. It includes the following principal branches: live-stock, field crops, dairy, statistics, co-operation and markets, a bee division and a debt adjustment bureau. The Live Stock Branch provides the organization for examining and licensing stallions, purchasing and selling cattle, sheep and hogs to farmers on credit terms, and registering brands for live stock. Pure-bred sire areas are being created under statutory authority in order to eliminate undesirable sires and improve the quality of live stock. The poultry industry is promoted through the flock-culling service, the turkey-grading service and the approved hatchery policy. The Field Crops Branch aids in promoting better crops and providing control measures for suppressing insect and weed pests. The Dairy Branch directs the grading of cream at all the creameries, promotes herd improvement through cow-testing and administers the provisions of the Dairy Products Act with respect to licensing creamery operators, cream testers, and the bonding of creameries. The Statistics Branch, in co-operation with the Dominion Bureau of Statistics, maintains a crop-reporting service and gathers annual data respecting the crops and live stock of the province. The Co-operation and Markets Branch grants charters to co-operative associations under the Co-operative Associations Act, promotes co-operative stock shipping and poultry marketing and maintains an exchange service by a weekly news letter through which buyer and seller are brought together. An Apiary Division has been organized to assist bee-keeping, which is developing substantially. Agricultural societies are organized by the Department and grants are paid through the Department, while direction of the activities of societies is centered in the College of Agriculture of the University of Saskatchewan.

Alberta.—The Alberta Department conducts the following main services: agricultural schools and demonstration farms, field crops, dairy, live-stock, veterinary, poultry, apiaries, fairs and institutes, branding, game regulation, women's bureau service, provincial publicity bureau, crop reports and statistics, marketing services, district agriculturists and a branch looking after the fur farm leases of the province.

The attention of the Department has recently been given to the development of apiculture and a Provincial Apiarist is engaged in this work. Increased encouragement is being given to the live-stock industry through the "Pure-bred Bulls Purchase Act", and in giving supervision to the feeding plan for beef cattle now being carried out by the "Red Label" Beef Association. Increasing efforts are being made to cope with the weed menace and encouragement is being given to the sale and production of registered seed. The poultry industry is also receiving increased attention. Money is expended each summer in connection with soil survey work, and special efforts are being directed to the development of forage crops and grasses and the improvement of pasturage.

British Columbia.—The Department of Agriculture consists of three main divisions which deal with general administration, animal industry and plant industry.

The extension service with representatives located in 15 agricultural districts is directly under General Administration, together with the Markets Branch. The Animal Industry Division includes: dairy, poultry, veterinary and general live-stock branches, as well as brands inspection and junior club work. The Plant Industry Division includes: plant quarantine, disease and pest control, pathology and entomology, apiary inspection, field crops and horticultural activities.

Particular attention has been given to the development of a live-stock policy, by which the favourable climatic conditions of the Coast districts of British Columbia will enable farmers to finish live stock ready for the market at seasons when weather conditions are not favourable in other parts of Canada. This policy has been devised with the aim of enabling the farmers of British Columbia to supplement the work of the prairie live-stock men in maintaining a continuous supply of well-finished animals for the market.

The British Columbia Department of Agriculture through its Dairy Branch has compiled its initial list of pure-bred sires (of the four dairy breeds) which have five or more daughters with records of production. Where known the records of the dams of these daughters are also given, offering opportunities for comparison. Although the full value of this service is not realized as yet, the breed associations have expressed approval of the undertaking. It enables them to recognize worthy sires in time and avoids their being lost or prematurely killed through ignorance of their value.

Subsection 3.—Dominion and Provincial Agricultural Experimental Stations.

Amongst the most important contributions of Canadian Governments to the development of agriculture throughout the country, is the maintenance of agricultural experimental stations, where research work in both plant and animal breeding and adaptation to climatic conditions is carried on. Already this work has had a profound effect in the improvement of Canadian agriculture. The introduction during recent years of Marquis wheat is an outstanding example, and it is of interest to note that other newer wheats, particularly Garnet, also originated by the experimental farms, may in the near future replace the Marquis in large areas. Among the earlier experiments undertaken, the results of which have passed permanently into good Canadian farm practice, may be mentioned those relating to early seeding, summer fallowing, the use of farmyard manure, the fertilizing value of clover crops and the introduction of suitable grasses and clovers. Both the common red clover and alfalfa now enter into rotations as the result of experiments and efforts to obtain hardy strains and to discover means of resistance to winter-killing. Further experiments with earlier-ripening and drought-resisting cereals are now being carried on, each new discovery increasing the cultivable area of Canada. Other researches relate to the production of frost-resisting fruit trees for the Prairie Provinces. This research work has already had a profoundly ameliorating effect upon Canadian agriculture. Statements regarding the work now under way at the Dominion Experimental Farms and Stations and at Provincial Agricultural Colleges and Experimental Stations follow.

(A) Dominion Experimental Farms and Stations.[1]

Inaugurated in 1886 by Act of Parliament (49 Vict., c. 23), the Dominion Experimental Farms system was at first made up of the Central Farm at Ottawa and four branch farms: one at Nappan, Nova Scotia, for the Maritime Provinces; one at Brandon for Manitoba; one at Indian Head for the Northwest Territories; and one at Agassiz for British Columbia.

The opening up and rapid settlement of the Dominion have led to a corresponding increase in the number of experimental farms and stations.[1] These, with an experimental fox ranch, now total 28, with a total acreage of 15,577, as compared with the original five farms, with a total acreage of 3,472, established in 1886. The following list shows the present number of farms and stations, with the acreage of each and the date of establishment.

DOMINION EXPERIMENTAL FARMS AND STATIONS, 1932.

Farm or Station.	Province.	Acreage.	Date Established.
Central Farm, Ottawa	Ontario	825·5	1886
Kapuskasing Station	Ontario	1,270	1910
Harrow Station	Ontario	198·3	1909
Charlottetown Station	P.E.I.	173·1	1909
Summerside Fox Ranch	P.E.I.	12	1925
Nappan Farm	Nova Scotia	465	1886
Kentville Station	Nova Scotia	452·9	1912
Fredericton Station	New Brunswick	525	1912
Ste. Anne de la Pocatière Station	Quebec	319	1911
Cap Rouge Station	Quebec	345·3	1911
Lennoxville Station	Quebec	600	1914
Farnham Station	Quebec	95	1912
La Ferme Station	Quebec	1,200	1916
L'Assomption Station	Quebec	160	1928
Brandon Farm	Manitoba	842	1886
Morden Station	Manitoba	614	1915
Indian Head Farm	Saskatchewan	1,320	1886
Indian Head Forest Nursery Station	Saskatchewan	480	[2]
Sutherland Forest Nursery Station	Saskatchewan	320	[2]
Rosthern Station	Saskatchewan	650	1908
Scott Station	Saskatchewan	520	1910
Swift Current Station	Saskatchewan	800	1920
Lacombe Station	Alberta	396	1907
Lethbridge Station	Alberta	500	1906
Windermere Station	British Columbia	425	1923
Summerland Station	British Columbia	545	1914
Agassiz Farm	British Columbia	1,400	1886
Sidney Station, Vancouver Island	British Columbia	130	1912

In addition there are 12 sub-stations, *viz.*, Regina and Rosthern, Sask.; Wainwright, Fort Vermilion and Beaverlodge, Alberta; Fort Smith, Resolution, Providence and Good Hope, Northwest Territories; Carmacks, Yukon; Horse Farm, St. Joachim (operated from Cap Rouge), and Harrington Harbour, Quebec. There is also the Dominion Range Experiment Station at Manyberries, Alberta, and a special Forage Crops Research Station at the University of Saskatchewan, Saskatoon. Experimental work under the Division of Illustration Stations is conducted on 13 farms in Prince Edward Island, 16 in Nova Scotia, 19 in New Brunswick, 58 in Quebec, 18 in Ontario, 15 in Manitoba, 30 in Saskatchewan, 22 in Alberta and 18 in British Columbia. Small experimental plots are also being operated at several points along the line of the Hudson Bay Railway.

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[1] The five original farms established in 1886 are known as "Experimental Farms"; those added since are styled "Experimental Stations". No distinction in the work is implied by these titles.

[2] Transferred in 1931 from the Forest Service, Department of the Interior, to the Department of Agriculture.

Organization of the System of Experimental Farms.—The Central Farm at Ottawa, as its name implies, is the centre or headquarters of the system. Thereat are stationed the Director, having control and general supervision of the whole, and the chief technical officers, each having charge of his special line of work, both at the Central Farm and the branch farms. At Ottawa, the policy to be pursued throughout the system is settled by agreement after discussion by the Director, the technical officers, and the superintendents on whose branch farms the work is to be conducted. The technical staff at Ottawa supervises the actual experimental work at the Central Farm. At the branches, the superintendents are in charge of the carrying out of the various lines of general experiment, and also conduct experiments of local importance.

The divisions at Ottawa, which represent the different lines of work carried on throughout the system, and have each a technical officer in charge, are as follows: (1) animal husbandry; (2) bacteriology; (3) bees; (4) botany; (5) cereals; (6) chemistry; (7) extension and publicity; (8) economic fibre production; (9) field husbandry; (10) forage plants; (11) horticulture; (12) illustration stations; (13) poultry and (14) tobacco. Briefly the main lines of the work of these divisions are as follows:—

Animal Husbandry.—This division is concerned mainly with projects relating to the economical production of live stock and live stock products on the farms of Canada. Demonstrational, experimental and research work in breeding, feeding, housing and management of beef cattle, dairy cattle, horses, sheep and swine and in the handling of the products of these classes of live stock on the farm constitute the main lines of work of the division.

Bacteriology.—The work of this division consists chiefly in research conducted in close co-operation with other divisions on problems having a bacteriological bearing. The main lines of investigation deal with questions of pure milk production and maintenance, soil fertility, the preparation and preservation of foodstuffs and fodders, bee diseases, etc. Assistance is given to farmers through the preparation and distribution of cultures of legume bacteria for seed inoculation. Further service is rendered through the bacteriological analysis of water, milk, foods and feeding stuffs, soils and many other materials.

Bees.—The work of the Bee Division is divided into three parts: (1) Experimental and research work related to the care and management of bees. This includes the investigation of such problems as swarm control, wintering, bee diseases, queen breeding, etc. (2) Honey investigations. In co-operation with other divisions a thorough examination of Canadian honeys is being made and projects relating to the storage of this commodity are being conducted. In addition the inspection of honey for export trade is being carried out. (3) The dissemination of information by means of bulletins, pamphlets, press articles, correspondence, lectures, etc., to the beekeepers throughout Canada.

Botany.—The work of this division deals with two main phases, economic botany and plant pathology. The former comprises a study of plants of use in agriculture, including medicinal and poisonous plants and plants of general economic value. Considerable attention is being given to a Dominion-wide survey of weeds and a study of the life history of the more important kinds. Many phases pertaining to this section of work are carried on co-operatively with other services in the Department. Pollination studies, pasture investigations, etc., are being carried on under a well-devised policy. A herbarium is maintained, which is becoming increasingly valuable as a reference collection not only for the use of the Department, but also for students and colleges. For reference purposes an extensive collection of seeds has been accumulated, and constitutes one of the most valuable in the Dominion. It comprises representative collections of seeds of plants occurring all over the globe.

The plant pathology section is devoted to research on diseases caused by fungi and bacteria occurring on each and every kind of plant, whether constituting our natural resources, including forestry, or grown for special purposes. Without a recognition of the most up-to-date and modern means used in plant pathology, immense national losses would result. Many instances might be quoted to indicate that modern methods of control and prevention have been responsible for a substantial reduction in the cost of production of all kinds of crop plants.

At Ottawa the Central Plant Pathological Laboratory serves as headquarters for the Dominion. At the same time, besides undertaking special phases of mycological research, the Central Laboratory directs the policy of a series (10) of branch laboratories extending from coast to coast and dealing with the important phases of work of local interest and importance. Among these laboratories, the Dominion Grain Rust Research Laboratory at Winnipeg may be specially mentioned, as an example of a centre of close co-operation between Dominion and Provincial agencies in the study and prevention of losses from grain rust. Three of the branch laboratories deal with the fruit industry, *viz.:* Kentville, N.S., St. Catharines, Ont. and Summerland, B.C. Field crop and potato diseases are dealt with mainly at Charlottetown, P.E.I. and Fredericton, N.B., while Edmonton, Saskatoon, and the Winnipeg laboratory already referred to, are concerned with the diseases of grain most important economically, *viz.*, smuts, rusts, foot and root rots, etc. Saanichton, B.C., serves the interests of Vancouver island and the Fraser valley.

The Central Laboratory directs a Dominion-wide plant disease survey, keeping a close watch on the progress of diseases and enabling steps to be taken without delay to prevent the unsuspected establishment of the insidious enemies of agriculture throughout the Dominion.

The seed potato certification service is also directed from these headquarters and its aggressive policy has secured most valuable export markets for the Dominion.

The National Mycological Herbarium and a unique collection of forest pathological and wood-destroying fungi, both of specimens and living cultures may be mentioned as outstanding among reference collections.

In addition to these more or less specialized research phases of work, the importation of plants and plant products is closely supervised to prevent entry of destructive plant diseases. Thus there exists a plant pathological service devoted to the maintenance of health and quality of every agricultural commodity produced in Canada.

Cereals.—The chief functions of the Cereal Division may be enumerated as follows: (1) the production of superior varieties of cereal and leguminous grains by a process of breeding and selection; (2) the importation and testing of promising varieties from other countries; (3) the production of *élite* stock seed of registerable varieties of grain for propagation by members of the Canadian Seed Growers' Association; (4) the evaluation of various crop combinations which may prove especially desirable for specific purposes; (5) the systematic description and study of leading varieties; (6) the verification of the genuineness and purity of seed stocks submitted for the purpose; (7) the investigation of varieties of grain for which a licence has been requested, in accordance with the Canada Seeds Act; (8) the identification of varieties submitted by farmers and others; (9) the encouragement of the use of good seed of adapted varieties through the use of exhibits, press articles and public addresses; (10) the investigation of special problems which have a bearing on cereal breeding and development work.

Probably the most important problem which the division has in hand at the moment is an attempt to develop for Western Canada a variety of hard red spring wheat capable of resisting the ravages of stem rust. This work, which is centralized chiefly at the Rust Laboratory at Winnipeg, appears to be progressing rapidly toward the goal desired.

Chemistry.—Investigations towards the solution of problems affecting Canadian agriculture and direct assistance to farmers, market gardeners, provincial agricultural representatives and others through correspondence and analysis, constitute the two chief phases of the division's activities. Further important work includes the official chemical examination of food products submitted by the Health of Animals Branch, the Dairy and Cold Storage Branch and the Fruit Branch—about 2,000 samples in all. The division also renders chemical assistance to a number of branches of the Government service, *e.g.*, the National Parks Branch, Department of the Interior; the Department of Marine and the Department of Fisheries.

Extension and Publicity.—This division edits and prepares for printing all publications issued by the Experimental Farms, prepares and stages educational exhibits at fairs and exhibitions throughout Canada, maintains and operates a lending bureau of educational lantern slides, issues annually to the press about 200 timely and seasonal articles, and in various other ways makes the work of the farms as widely known as possible.

Economic Fibre Plants.—Extensive field and mill experiments are carried out with the best varieties of fibre flax and hemp on the Experimental Farm plot fields at Ottawa and several of the branch farms. The division renders valuable marketing services to the Canadian flax growers by serving as a medium for trade with Ireland. Increasing amounts of fibre seed are being sold in the Irish market each year.

Field Husbandry.—Experiments are being conducted by this division in order to learn the most suitable crop rotations and crop sequences for various parts of Canada. Information is being secured on the newest and best methods of preparing the land for different crops, as well as on the most efficient methods of seeding and harvesting. Investigations are in progress in regard to drainage, to irrigation and learning the most efficient methods of conserving and utilizing soil moisture in the Prairie Provinces.

How to control the noxious weeds which cause such serious economic losses in many parts of Canada is an important problem studied by means of various cropping systems, cultivation methods and applications of chemicals. How to improve the carrying capacity of unproductive pasture land is another project under investigation. The cost of operating tractors, the value of new types of farm machinery, and the cost of producing various farm crops is being studied. Comprehensive trials with various silage crops are being continued in order to secure the most reliable information on the proper time and method of ensiling corn, sunflowers, red clover, sweet clover, alfalfa, buckwheat, cereals and other farm crops. To determine the most economical means of using farm manure and commercial fertilizers for farm crops is the object of another group of field husbandry experiments.

Forage Plants.—This division has for its work the improvement of forage plants by breeding, the technique of seed production, principles of compounding seeds mixtures, response of different species to grazing, the introduction and testing of new species, and related problems. These studies cover a wide range of crop plants including herbage grasses and legumes, corn, sunflowers, field roots, sugar beets, soya beans, and cereals for forage. Research work with crops that are adapted to Eastern Canada is centered at Ottawa. In Western Canada the Dominion Forage Crops Laboratory has been established at Saskatoon, Sask., in co-operation with the University of Saskatchewan, for the purpose of developing early maturing, hardy, and drought-resistant strains of herbage plants adapted to the Prairie Provinces. At the Dominion Range Experiment Station at Manyberries, Alberta, range investigations are in progress to study changes in the natural vegetation under different systems of grazing and other feed problems associated with range management.

Horticulture.—The Division of Horticulture deals with fruit growing, vegetable gardening and with ornamental plants. The breeding of new varieties has been an important feature of the work of this division. Some of the outstanding fruits originated there which are being planted in Canada are: apples—Melba, Joyce, Hume, Lobo, Linda and Sandow; raspberries—Brighton and Count; strawberries—Cassandra and Portia, and of vegetables: corn—Banting and Pickaninny; egg plant—Blackie; rhubarb—Ruby; tomato—Abel, Alacrity, Bestal and Herald.

Valuable research work in cider making is being done in this division and cold storage experiments with fruits are in progress. The division co-operates with farmers in orchard experiments and blueberry and cranberry investigations. Research in plant nutrition is also an important line of work.

Illustration Stations.—By comparative demonstration the Division of Illustration Stations is carrying forward a co-operative program of crop introduction and improvement on some 209 privately-owned farms. These stations are located in the different provinces, primarily in newly-settled agricultural communities, where the most suitable varieties and crops are not being grown, or in the older settled districts, which have developed acute problems in crop production, resulting from weed infestation, soil drifting, depletion of soil fertility, as well as many other varying factors, which limit crop growth. As centres for production of seed grain, seed potatoes, grasses and clover seeds from the most suitable and hardy varieties, the illustration stations have accomplished a great deal and have established leadership in the community in general farm improvement, including livestock, building and home beautification.

Poultry.—While past conditions called for work largely along practical demonstrational lines, the present demands more scientific investigation, particularly in the studies of nutrition, disease and breeding problems. To meet these requirements, trained men have been added to the staff and, through the co-operation of the Health of Animals Branch, additional assistance has been supplied for the study of disease, so that the division is equipped as never before to assist the industry as a whole and the individual poultryman in particular in solving the various problems that are continually arising in this rapidly growing field. In addition, the registration of poultry has increased throughout the whole Dominion.

Tobacco.—The Tobacco Division is concerned with investigational and research work in connection with the tobacco industry of Canada. This includes active research on problems of fertilizers and soils; breeding, selection and standardization of varieties; cultural methods; curing and fermentation; diseases and insects; marketing; exhibitions and educational work. Through a closer co-ordination between Dominion, provincial and industrial agencies the industry has made great progress during the past five years, both in the domestic and export markets. The research work of the Dominion tobacco service was completely reorganized in 1929 and subsequently; a co-operative relationship has been developed with the Department of Trade and Commerce with a view to opening up new outlets for Canadian leaf; joint committees, consisting of Dominion and provincial officials, growers and members of the trade, have been set up in Ontario and Quebec to further the interests of the industry. In general, the Tobacco Division renders assistance in the development of Canadian tobacco production along sound economic lines.

In addition to the work done by the Divisions of Extension and Publicity and Illustration Stations, the results of the work of the Experimental Farms are made available to the farmer: (1) by correspondence; (2) by publications; and (3) by articles in the press. The farm officers devote considerable time each year to lecturing, demonstrating, judging at fairs and assisting at short courses in agriculture. Excursions to the various farms are also a valuable means of bringing the work to the attention of the farmer.

(B) Provincial Agricultural Colleges and Experimental Stations.

Under the above heading, outlines of the work done at provincial agricultural colleges and experimental stations were given by provinces at pp. 198-203 inclusive of the 1930 Year Book. The interested reader is referred to that volume, and to the following provincial publications for information concerning courses and programs of work at these institutions:—

Nova Scotia.—Annual Report of the Department of Natural Resources for Nova Scotia; College Prospectus of the College of Agriculture, Truro, N.S.

Quebec.—The Annual Report of Macdonald College, Ste. Anne de Bellevue, Quebec, and the prospectuses and annual announcements of the School of Agriculture, Ste. Anne de la Pocatière, and the Oka Agricultural Institute, Lake of Two Mountains, Quebec.

Ontario.—Annual Report of the Ontario Agricultural College and Experimental Farm, Guelph, Ont.

Manitoba.—Annual Report of the Manitoba Agricultural College, Winnipeg, Man.

Saskatchewan.—Annual Report of the College of Agriculture, University of Saskatchewan, Saskatoon, Sask.

Alberta.—Annual Report of the College of Agriculture, University of Alberta, Edmonton, Alberta.

British Columbia.—Annual Report of the Faculty of Agriculture, University of British Columbia, Vancouver, B.C.

Section 2.—Statistics of Agriculture.[1]

Census Statistics.—In addition to the statistics collected annually, which are the subject of this section, additional information is published, following each decennial census, on such subjects as the total number of farms, their tenure, acreage, value, mortgage debt, etc. In this volume of the Year Book, the latest information compiled to date on these subjects will be found in Appendix II.

Crop-Reporting Service.—The voluntary crop-reporting service of the Dominion Government, which has been in operation since 1908, has for its object the issue of accurate, timely and independent reports on crop conditions throughout the Dominion: first, in the interests of the general body of Canadian farmers; secondly, for the information and guidance of other interests allied to and dependent upon agriculture (interests represented by statesmen, economists, bankers, grain dealers, transportation agents and others); and thirdly, for reporting to the Institute of Agriculture at Rome (to which Canada is an adhering country), in return for reports on the production of other countries and of world totals which influence prices and consequently affect the interests of Canada. Supplementing the monthly reports from crop correspondents, the Bureau issues telegraphic crop reports utilizing the services of agriculturists throughout the Dominion. For the Prairie Provinces, these are issued every week from the first of June to the first of September, while the reports on a Dominion-wide basis are issued every two weeks during the same period. The program of reports for 1933-34 is given in the Monthly Bulletin of Agricultural Statistics, January, 1933, pp. 34-36 and is also issued as a special leaflet.

Annual Statistics.—In addition to the crop-reporting service, statistics of the areas under field crops and of the numbers of farm live stock are collected. These arrangements have been in force since 1918, and are carried out by the Dominion Bureau of Statistics in co-operation with the Provincial Governments. The statistics are secured by simple schedules which are at present returned by about one-fifth of the farmers of Canada. They form the basis of the estimates for the whole of Canada. The results for wheat, oats, barley, rye and flax in the three Prairie Provinces are ready for publication in August, while the results for the remaining crops and for the numbers of farm live stock are published in November and December. The areas, thus determined, when multiplied by the average yields per acre as reported by crop correspondents, form the basis of the total estimated production for each crop.

The June schedule covers the areas sown to field crops, the numbers of live stock and poultry on hand and breeding and marketing intentions with regard to live stock and poultry. The December schedule contains the same items with the exception of field crop areas.

In 1932, in eight of the provinces, the schedules were distributed and collected through the agency of the rural schools, under plans which have been found effective in securing a larger sample of the farms of the country than could be obtained in any other way. In British Columbia the schedules were sent direct to the farmer through the mail.

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[1] Revised under the direction of Dr. T. W. Grindley, Chief of the Agricultural Branch, Dominion Bureau of Statistics. This Branch is concerned with both primary and secondary statistics of agriculture, including statistics of the production and distribution of agricultural commodities. The primary statistics relate mainly to the reporting of crop conditions, crop and live-stock estimates, values of farm lands, wages of farm labour, and monthly and annual prices received by farmers for their products. The secondary statistics relate to the marketing of grain and live stock, and reports on the milling and sugar industries and cold-storage holdings. A list of the publications of this Branch is given in Chapter XXIX, Section I, under "Production".

Monthly Bulletin of Agricultural Statistics.—Originally established in 1908 as the "Census and Statistics Monthly", but changed to its present title in April, 1917, this publication is now in its twenty-sixth year. It is the official organ, not only for the monthly crop reports and annual statistics previously described, but also for statistics of dairying, fur farming, fruit, hives and honey, hops, tobacco, maple products, sugar beets, beet sugar, flax fibre, clover and grass seeds, exports, visible supplies, prices, values, foreign agriculture and other subjects in considerable variety.

Presentation of Agricultural Statistics.—In the current edition of the Year Book, statistics of agriculture are presented under the following headings: (1) Agricultural revenue and wealth; (2) Acreage, yield and value of principal field crops, distribution of the wheat and oat crops, etc.; (3) Farm live stock and poultry; (4) Fur farming; (5) Dairying; (6) Fruit production; (7) Special agricultural crops; (8) Farm labour and wages; (9) Prices of agricultural produce; (10) Agricultural statistics of the census; (11) Miscellaneous agricultural statistics; (12) Principal agricultural statistics of the world.

Subsection 1.—Agricultural Revenue and Wealth.

Revenue.—Table **1** shows under principal headings the gross agricultural revenue of Canada, by provinces, for the years 1928 to 1932. It is important to note that the figures represent gross values, as no distinction is made between crops used as materials for other kinds of production, such as the feeding of live stock, and no allowance is made for the costs of production.

1.—Estimated Gross Annual Agricultural Revenue of Canada, Itemized by Provinces, 1928-32. ("000" omitted.)

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Canada—					
Field crops	1,125,003	948,981	662,041	432,199	416,587
Farm animals	197,880	207,317	166,630	96,778	69,033
Wool	5,099	4,470	2,311	1,644	1,093
Dairy products	297,625	291,743	269,844	161,244	131,623
Fruits and vegetables	48,756	46,398	49,417	39,692	30,245
Poultry and eggs	106,653	107,664	95,227	65,178	48,824
Fur farming	6,106	6,791	4,925	3,557	2,732
Maple products	5,583	6,119	5,251	3,538	2,747
Tobacco	6,834	6,276	7,058	7,178	6,088
Flax fibre	509	393	371	179	170
Clover and grass seed	2,957	2,123	2,482	1,497	962
Honey	3,015	2,806	2,584	2,246	1,651
Totals	**1,806,020**	**1,631,081**	**1,268,141**	**814,930**	**711,898**
Prince Edward Island—					
Field crops	12,444	16,940	10,973	6,829	6,393
Farm animals	2,353	2,405	2,212	1,005	753
Wool	146	122	50	35	24
Dairy products	3,804	2,955	2,500	1,933	1,501
Fruits and vegetables	253	253	149	118	98
Poultry and eggs	1,637	1,523	1,461	992	701
Fur farming	1,641	1,741	1,010	779	598
Clover and grass seed	18	35	43	4	9
Honey	1	2	1	1	1
Totals	**22,297**	**25,976**	**18,399**	**11,696**	**10,078**

1.—Estimated Gross Annual Agricultural Revenue of Canada, Itemized by Provinces, 1928-32. ("000" omitted)—continued.

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Nova Scotia—					
Field crops	18,824	20,945	16,647	10,087	10,206
Farm animals	4,615	4,687	4,186	2,313	1,909
Wool	391	364	197	111	56
Dairy products	11,802	11,464	10,258	6,934	5,608
Fruits and vegetables	4,243	3,628	4,042	3,870	2,222
Poultry and eggs	1,761	1,905	1,819	1,351	1,007
Fur farming	367	346	325	228	175
Maple products	59	56	36	26	49
Clover and grass seed	12	10	10	-	-
Honey	6	7	7	9	6
Totals	**42,080**	**43,412**	**37,527**	**24,929**	**21,238**
New Brunswick—					
Field crops	18,275	23,835	18,554	10,670	12,629
Farm animals	3,778	3,647	3,746	3,214	2,295
Wool	242	191	89	81	45
Dairy products	8,662	8,734	7,730	6,333	4,420
Fruits and vegetables	1,011	999	1,027	966	697
Poultry and eggs	1,835	1,720	1,714	1,411	1,214
Fur farming	893	715	624	498	383
Maple products	32	38	27	21	20
Clover and grass seed	16	18	12	-	3
Honey	17	22	11	10	5
Totals	**34,761**	**39,919**	**33,534**	**23,204**	**21,711**
Quebec—					
Field crops	130,363	153,664	120,366	73,478	70,382
Farm animals	37,319	41,001	32,300	19,729	13,314
Wool	1,367	1,320	745	534	332
Dairy products	93,116	86,698	83,630	39,162	30,433
Fruits and vegetables	7,577	7,974	7,325	6,465	4,777
Poultry and eggs	16,180	14,407	13,513	9,243	7,504
Fur farming	1,506	2,104	1,258	693	532
Maple products	3,604	4,767	3,612	1,817	1,727
Tobacco	978	1,210	792	336	329
Clover and grass seed	151	115	89	154	110
Honey	611	438	455	595	216
Totals	**292,772**	**313,698**	**264,085**	**152,206**	**129,656**
Ontario—					
Field crops	243,768	241,778	179,919	124,541	113,904
Farm animals	75,908	76,022	60,738	33,486	23,222
Wool	1,502	1,323	632	458	287
Dairy products	117,935	115,757	103,194	56,519	46,422
Fruits and vegetables	19,658	19,208	20,207	16,424	11,969
Poultry and eggs	45,993	44,773	41,461	29,491	21,797
Fur farming	748	777	817	603	463
Maple products	1,888	1,258	1,576	1,674	951
Tobacco	5,823	5,039	6,244	6,814	5,703
Flax fibre	509	393	371	179	170
Clover and grass seed	2,314	1,672	1,855	1,110	615
Honey	1,267	1,208	870	824	800
Totals	**517,313**	**509,208**	**417,884**	**272,123**	**226,446**
Manitoba—					
Field crops	113,492	78,919	52,975	24,847	28,981
Farm animals	14,172	14,367	11,846	6,911	4,704
Wool	163	162	120	60	28
Dairy products	17,597	14,404	15,007	12,139	9,909
Fruits and vegetables	1,567	1,464	1,644	1,281	986
Poultry and eggs	7,272	8,920	7,998	5,237	3,893
Fur farming	335	374	263	195	150
Clover and grass seed	103	40	184	87	50
Honey	751	822	910	516	412
Totals	**155,452**	**119,472**	**90,947**	**51,273**	**49,113**

1.—Estimated Gross Annual Agricultural Revenue of Canada, Itemized by Provinces, 1928-32. ("000" omitted)—concluded.

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Saskatchewan—					
Field crops	348,586	235,248	135,695	70,347	80,047
Farm animals	23,390	25,150	20,744	12,490	9,535
Wool	237	226	108	80	74
Dairy products	21,331	23,125	19,847	14,511	12,584
Fruits and vegetables	2,737	1,850	2,584	2,053	1,674
Poultry and eggs	12,934	13,454	10,121	6,934	5,509
Fur farming	108	127	152	154	118
Clover and grass seed	260	50	85	10	62
Honey	78	74	108	73	46
Totals	**409,661**	**299,304**	**189,444**	**106,652**	**109,649**
Alberta—					
Field crops	220,786	157,254	110,284	98,916	83,331
Farm animals	29,322	32,271	24,422	14,584	10,898
Wool	794	519	250	228	195
Dairy products	14,980	18,928	17,676	16,573	14,661
Fruits and vegetables	1,858	1,800	2,173	1,741	1,426
Poultry and eggs	9,867	11,880	10,147	5,883	4,115
Fur farming	289	340	303	298	229
Clover and grass seed	77	176	171	83	77
Honey	67	78	99	92	44
Totals	**278,040**	**223,246**	**165,525**	**138,398**	**114,976**
British Columbia—					
Field crops	18,465	20,398	16,628	12,484	10,714
Farm animals	7,023	7,767	6,436	3,046	2,403
Wool	257	243	120	57	52
Dairy products	8,398	9,678	10,002	7,140	6,085
Fruits and vegetables	9,852	9,222	10,266	6,774	6,396
Poultry and eggs	9,174	9,082	6,993	4,636	3,084
Fur farming	219	267	173	109	84
Tobacco	33	27	22	28	56
Clover and grass seed	6	7	33	49	36
Honey	217	158	123	126	121
Totals	**53,644**	**56,849**	**50,796**	**34,449**	**29,031**

Table **1** shows that in 1932 the estimated agricultural revenue of Canada was $711,898,000 as compared with $814,930,000 in 1931, $1,268,141,000 in 1930, $1,631,081,000 in 1929 and $1,806,020,000 in 1928. The total for 1932 shows a decrease of $103,032,000 or 12·8 p.c. as compared with 1931. The upward movement of farm prices since the above valuations were made would suggest an upward revision for 1932 revenue when new figures are compiled in March, 1934.

Wealth.—Table **2** shows approximately, by provinces, the gross agricultural wealth of the Dominion in 1932.

2.—Estimated Gross Agricultural Wealth of Canada, by Provinces, 1932. ("000" omitted.)

Province.	Lands.	Buildings.	Implements and Machinery.	Live Stock.	Poultry.	Animals on Fur Farms.	Agricultural Production.	Total.
	$	$	$	$	$	$	$	$
P.E. Island	17,148	19,687	8,116	4,289	528	797	10,078	60,643
Nova Scotia	35,947	43,890	10,554	10,780	818	334	21,238	123,561
New Brunswick	32,795	38,680	13,253	11,057	1,023	505	21,711	119,024
Quebec	328,025	257,918	97,270	73,949	5,980	1,413	129,656	894,211
Ontario	371,272	487,009	151,928	114,740	13,891	1,439	226,446	1,366,725
Manitoba	145,156	88,389	54,847	29,983	2,536	481	49,113	370,505
Saskatchewan	556,138	223,795	185,510	63,964	4,169	444	109,649	1,143,669
Alberta	377,797	137,332	116,301	52,966	3,052	709	114,976	803,133
British Columbia	83,792	46,224	12,885	13,994	2,141	392	29,031	188,459
Totals	**1,948,070**	**1,342,924**	**650,664**	**375,722**	**34,138**	**6,514**	**711,898**	**5,069,930**

In this table, full use is made of the recently published results of the census of 1931 giving the values of lands, buildings, and implements and machinery for 1930. The 1932 figures quoted for buildings and for implements and machinery correspond with the values quoted in the 1930 returns. These items change very little in value. The 1932 figures for value of lands are based on the 1930 census figures but are corrected to 1932 levels by the use of the annual estimates of farm land values. The other four items—live stock, poultry, animals on fur farms and agricultural production—are estimates for 1932.

The gross agricultural wealth of Canada for 1932 is estimated at approximately $5,069,930,000 as compared with $5,696,972,000, the revised estimate for 1931.

Subsection 2.—Acreage, Yield and Value of Field Crops.

The Chief Field Crops of the Last Twenty Years.—In Table 3 will be found a summary statement of the acreages, yields and values of wheat, oats, barley, rye, buckwheat, flaxseed, potatoes, hay and clover and alfalfa for the latest 10 years. Comparative figures back to 1908, given at pp. 230-232 of the 1929 Year Book, indicate the recent growth of Canadian agriculture. In particular may be noted the tripling of the wheat crop, the almost doubling of the oat crop, the tripling of the barley crop, the thirteenfold increase in the rye crop, the 40 p.c. addition to the hay and clover crop and the sevenfold increase in the alfalfa crop within the past 25 years, disregarding the 1931 and 1932 crops as not, by any means, representing maximum yields. On the other hand, the acreages and yields of the potato crop have not shown a wide variation throughout the period, presumably because this crop is produced mainly for home consumption. Those who desire figures for earlier years will find certain information on acreage, yield and value on page xxiv of the Statistical Summary of Progress at the beginning of this volume.

3.—Areas, Yields and Values of Principal Crops Grown in Canada, 1923-32.[1]

Crop and Year.	Area.	Yield.	Total Yield.	Average Price	Total Value.
	000 acres.	bush. per acre.	000 bush.	$ per bush.	000 $
Wheat—					
1923	21,886	21·7	474,199	0·67	316,995
1924	22,056	11·9	262,097	1·22	320,362
1925	20,790	19·0	395,475	1·23	487,736
1926	22,896	17·8	407,136	1·09	442,221
1927	22,460	21·4	479,665	1·00	477,791
1928	24,119	23·5	566,726	0·80	451,235
1929	25,255	12·1	304,520	1·05	319,715
1930	24,898	16·9	420,672	0·49	204,693
1931	26,201	12·3	321,325	0·38	123,550
1932	27,182	15·8	428,514	0·30	129,105
Oats—					
1923	14,388	39·3	563,998	0·33	184,857
1924	14,491	28·0	405,976	0·49	200,688
1925	12,556	32·0	402,296	0·42	167,171
1926	12,741	30·1	383,416	0·48	184,098
1927	13,240	33·2	439,713	0·51	225,879
1928	13,137	34·4	452,153	0·47	210,956
1929	12,479	22·7	282,838	0·59	168,017
1930	13,259	31·9	423,148	0·24	102,919
1931	12,871	25·5	328,278	0·24	77,970
1932	13,148	29·8	391,561	0·18	71,538

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[1] For footnote see end of table, p. 232.

3.—Areas, Yields and Values of Principal Crops Grown in Canada, 1923-32[1] —continued.

Crop and Year.	Area.	Yield.	Total Yield.	Average Price.	Total Value.
	000 acres.	bush. per acre.	000 bush.	$ per bush.	000 $
Barley—					
1923	2,785	27·8	76,998	0·42	32,571
1924	3,407	26·1	88,807	0·70	61,760
1925	3,524	24·7	87,118	0·53	46,014
1926	3,647	27·4	99,987	0·52	52,059
1927	3,506	27·7	96,938	0·66	64,193
1928	4,881	27·9	136,391	0·56	76,112
1929	5,926	17·3	102,313	0·59	60,505
1930	5,559	24·3	135,160	0·20	27,254
1931	3,768	17·9	67,383	0·26	17,465
1932	3,758	21·5	80,773	0·20	15,794
Rye—					
1923	1,448	16·0	23,232	0·49	11,340
1924	891	15·4	13,751	0·99	13,679
1925	643	14·2	9,159	0·77	7,048
1926	754	16·2	12,179	0·77	9,431
1927	743	20·9	15,571	0·82	12,746
1928	840	17·4	14,618	0·79	11,491
1929	992	13·3	13,161	0·84	11,095
1930	1,448	15·2	22,019	0·20	4,402
1931	778	6·8	5,322	0·28	1,476
1932	774	11·6	8,938	0·17	1,564
Buckwheat—					
1923	440	22·3	9,744	0·84	8,192
1924	442	25·8	11,412	0·89	10,149
1925	474	22·2	10,546	0·85	8,965
1926	457	21·6	9,882	0·87	8,598
1927	471	23·1	10,890	0·89	9,727
1928	503	21·7	10,899	0·93	10,128
1929	516	20·3	10,470	0·94	9,867
1930	490	22·2	10,903	0·65	7,124
1931	335	20·6	6,917	0·50	3,454
1932	368	22·9	8,424	0·42	3,540
Flaxseed—					
1923	630	11·3	7,140	1·77	12,644
1924	1,277	7·6	9,695	1·94	18,849
1925	843	7·4	6,237	1·85	11,542
1926	738	8·1	5,995	1·62	9,688
1927	476	10·3	4,885	1·55	7,562
1928	378	9·6	3,614	1·59	5,758
1929	382	5·4	2,060	2·38	4,898
1930	582	8·7	5,069	0·94	4,741
1931	627	3·9	2,465	0·79	1,944
1932	454	5·4	2,446	0·52	1,282
Potatoes—		cwt.	cwt.	per cwt.	
1923	561	99·0	55,497	1·02	56,398
1924	562	100·9	56,648	0·85	47,956
1925	522	77·0	40,217	2·06	82,860
1926	523	89·7	46,937	1·47	69,204
1927	572	81·2	46,458	1·17	54,341
1928	599	83·8	50,195	0·81	40,874
1929	544	73·4	39,930	1·59	63,372
1930	571	84·4	48,241	0·83	39,858
1931	584	90·0	52,305	0·43	22,359
1932	522	76·0	39,416	0·62	24,406
Hay and clover—		tons.	000 tons.	per ton.	
1923	9,726	1·55	14,845	10·97	162,882
1924	9,875	1·51	14,960	11·07	165,587
1925	9,563	1·56	14,962	10·35	154,886
1926	9,516	1·48	14,058	12·13	170,473
1927	10,227	1·70	17,370	10·41	180,835
1928	10,321	1·60	16,515	10·37	171,225
1929	10,560	1·50	15,833	11·65	184,528
1930	10,618	1·54	16,397	9·83	161,122
1931	8,532	1·64	13,960	7·62	106,343
1932	8,812	1·54	13,559	7·10	96,278

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[1] For footnote see end of table, p. 232.

3.—Areas, Yields and Values of Principal Crops Grown in Canada, 1923-32[1] —concluded.

Crop and Year.	Area.	Yield.	Total Yield.	Average Price	Total Value.
	000 acres.	tons per acre.	000 tons.	$ per ton.	000 $
Alfalfa—					
1923	391	2·65	1,029	11·58	11,914
1924	474	2·65	1,257	11·70	14,705
1925	637	2·48	1,582	12·72	20,120
1926	837	2·46	2,061	13·30	27,414
1927	910	2·37	2,157	12·03	25,946
1928	854	2·35	2,010	11·51	23,138
1929	799	2·30	1,835	12·63	23,183
1930	744	2·20	1,640	12·12	19,877
1931	557	2·49	1,388	10·36	14,381
1932	666	2·65	1,764	8·55	15,085

[1] Comparative figures for the years 1908-20 are given in the Canada Year Book, 1929, pp. 230-232. The total value of wheat for 1912 should be $139,090,000 instead of the $19,090,000 shown on p. 230 of the 1929 Year Book, the error being due to the dropping out of a figure.

Total Areas and Values, 1927-1932.—Table 4 shows for Canada and the provinces, over stated years, the total estimated areas and values of field crops, Table 5 the field crops of Canada compared as to quantity and value for 1931 and 1932, and Table 6 the areas, yields and values of the principal field crops in Canada, by provinces, for the years 1931 and 1932.

4.—Total Areas and Values of Field Crops in Canada, by Provinces, 1927-32.[1]

Province.	1927.	1928.	1929.	1930.	1931.	1932.
	acres.	acres.	acres.	acres.	acres.	acres.
Canada	**56,172,310**	**59,351,811**	**61,207,034**	**62,214,670**	**58,074,905**	**59,633,500**
P.E. Island	533,463	540,619	545,763	567,180	494,351	476,200
Nova Scotia	702,127	714,047	731,354	735,900	508,269	536,000
New Brunswick	889,277	900,376	908,659	911,490	804,693	907,500
Quebec	6,877,900	6,893,000	7,051,605	7,342,400	5,704,357	5,832,100
Ontario	10,305,045	10,357,960	10,020,294	10,009,200	9,064,649	9,224,300
Manitoba	5,968,983	6,744,467	6,687,163	6,794,700	5,664,109	5,866,800
Saskatchewan	19,527,971	21,063,678	22,420,232	22,868,300	21,946,242	22,333,900
Alberta	10,971,761	11,727,830	12,432,595	12,561,400	13,455,936	14,019,000
British Columbia	395,783	409,834	409,369	424,100	432,299	437,700
	$	$	$	$	$	$
Canada	**1,173,133,600**	**1,125,003,000**	**948,981,400**	**662,040,900**	**432,199,400**	**416,586,900**
P.E. Island	13,420,800	12,444,000	16,940,400	10,973,000	6,828,700	6,393,000
Nova Scotia	18,597,000	18,824,000	20,945,000	16,646,500	10,087,000	10,206,000
New Brunswick	18,413,500	18,275,000	23,835,000	18,554,000	10,670,000	12,629,000
Quebec	144,273,000	130,363,000	153,664,000	120,366,000	73,478,000	70,382,000
Ontario	255,900,000	243,768,000	241,778,000	179,919,000	124,541,000	113,904,000
Manitoba	82,280,000	113,492,000	78,919,000	52,975,000	24,847,000	28,981,000
Saskatchewan	348,005,000	348,586,000	235,248,000	135,695,000	70,347,100	80,046,900
Alberta	272,743,300	220,786,000	157,254,000	110,284,400	98,916,600	83,331,000
British Columbia	19,501,000	18,465,000	20,398,000	16,628,000	12,484,000	10,714,000

[1] For earlier figures see pp. xxiv-xxv of the Statistical Summary at the beginning of this volume.

5.—Field Crops of Canada, Compared as to Quantity and Value, 1931 and 1932.

("000" omitted.)

Field Crop.	Actual Value, 1932.	Value at Prices of 1931.	Actual Value, 1931.	Increase (+) or Decrease (−).	Due to Higher (+) or Lower (−) Prices.	Due to Larger (+) or Smaller (—) Quantities.
	$	$	$	$	$	$
Wheat	129,105	162,835	123,550	+ 5,555	− 33,730	+ 39,285
Oats	71,538	93,975	77,970	− 6,432	− 22,437	+ 16,005
Barley	15,794	21,001	17,465	− 1,671	− 5,207	+ 3,536
Rye	1,564	2,503	1,476	+ 88	− 939	+ 1,027
Peas	1,288	1,291	1,160	+ 128	− 3	+ 131
Beans	629	821	941	− 312	− 192	− 120
Buckwheat	3,540	4,212	3,454	+ 86	− 672	+ 758
Mixed grains	13,068	14,443	14,453	− 1,385	− 1,375	− 10
Flaxseed	1,282	1,932	1,944	− 662	− 650	− 12
Corn for husking	2,276	2,124	2,274	+ 2	+ 152	− 150
Potatoes	24.406	16,949	22,359	+ 2,047	+ 7,457	− 5,410
Turnips, etc	10,160	10.574	8,109	+ 2,051	− 414	+ 2,465
Hay and clover	96,278	103,320	106,343	− 10,065	− 7,042	− 3,023
Grain hay	20,312	20,486	22,130	− 1,818	− 174	− 1,644
Alfalfa	15,085	18,270	14,381	+ 704	− 3,185	+ 3,889
Fodder corn	7,869	11,316	11,416	− 3,547	− 3,447	− 100
Sugar beets	2,393	2,750	2,774	− 381	− 357	− 24
Totals	**416,587**	**488,802**	**432,199**	− **15,612**	− **72,215**	+ **56,603**
Increase or decrease	-	-	-	− 3·6 p.c.	— 16·7 p.c.	+ 13·1 p.c.

6.—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932.

Field Crop.	Year.	Area.	Yield.	Total Yield.	Average Price.	Total Value.
		acres	bush. per acre.	bush.	$ per bush.	$
Canada—						
Fall wheat	1931	537,658	28·8	15,475,000	0·52	8,085,000
	1932	536,000	28·1	15,062,000	0·46	6,929,000
Spring wheat	1931	25,663,270	11·9	305,850,000	0·38	115,465,000
	1932	26,646,100	15·5	413,452,000	0·30	122,176,000
All wheat	1931	26,200,928	12·3	321,325,000	0·38	123,550,000
	1932	27,182,100	15·8	428,514,000	0·30	129,105,000
Oats	1931	12,871,341	25·5	328,278,000	0·24	77,970,000
	1932	13,148,400	29·8	391,561,000	0·18	71,538,000
Barley	1931	3,768,269	17·9	67,382,600	0·26	17,465,000
	1932	3,757,600	21·5	80,773,000	0·20	15,794,000
Fall rye	1931	598,511	6·5	3,873,000	0·28	1,079,000
	1932	613,900	11·6	7,132,000	0·17	1,237,000
Spring rye	1931	179,023	8·1	1,449,000	0·27	397,000
	1932	159,900	11·3	1,806,000	0·18	327,000
All rye	1931	777,534	6·8	5,322,000	0·28	1,476,000
	1932	773,800	11·6	8,938,000	0·17	1,564,000
Peas	1931	82,640	16·6	1,369,400	0·85	1,160,400
	1932	84,800	17·9	1.518,500	0·85	1,288,300
Beans	1931	82,109	15·9	1,304,100	0·72	941,300
	1932	66,600	17·1	1,140,900	0·55	628,600
Buckwheat	1931	335,339	20·6	6,916,700	0·50	3,454,000
	1932	368,400	22·9	8,424,000	0·42	3,540,000

6.—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932—continued.

Field Crop.	Year.	Area.	Yield	Total Yield.	Average Price.	Total Value.
		acres	bush. per acre.	bush.	$ per bush.	$
Canada—concluded.						
Mixed grains	1931	1,186,877	33·2	39,431,000	0·37	14,453,000
	1932	1,184,000	33·0	39,036,000	0·33	13,068,000
Flaxseed	1931	627,430	3·9	2,465,000	0·79	1,944,000
	1932	453,700	5·4	2,446,000	0·52	1,282,000
Corn, husking	1931	131,695	41·4	5,449,000	0·42	2,274,000
	1932	130,000	38·9	5,057,000	0·45	2,276,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	583,926	90·0	52,305,000	0·43	22,359,000
	1932	521,500	76·0	39,416,000	0·62	24,406,000
Turnips, etc	1931	150,899	195·0	29,392,000	0·28	8,109,000
	1932	174,800	216·0	37,766,000	0·27	10,160,000
			tons	tons	per ton	
Hay and clover	1931	8,532,369	1·64	13,960,000	7·62	106,343,000
	1932	8,811,600	1·54	13,559,000	7·10	96,278,000
Alfalfa	1931	557,360	2·49	1,388,000	10·36	14,381,000
	1932	666,100	2·65	1,763,500	8·55	15,085,000
Fodder corn	1931	336,192	8·58	2,883,600	3·96	11,415,700
	1932	365,600	7·82	2,857,600	2·75	7,869,000
Grain hay	1931	1,800,000	2·00	3,613,000	6·13	22,130,000
	1932	1,899,500	1·76	3,342,000	6·08	20,312,000
Sugar beets	1931	49,997	9·08	454,000	6·11	2,774,000
	1932	45,000	10·00	450,000	5·32	2,393,000
Prince Edward Island—			bush.	bush.	per bush.	
Spring wheat	1931	20,291	16·2	328,000	0·85	279,000
	1932	23,300	18·5	431,000	0·66	284,000
Oats	1931	149,059	32·2	4,800,000	0·29	1,392,000
	1932	149,500	34·0	5,083,000	0·22	1,118,000
Barley	1931	3,732	22·8	85,000	0·51	43,000
	1932	4,000	25·2	101,000	0·42	42,000
Buckwheat	1931	1,868	26·6	49,700	0·50	25,000
	1932	2,600	27·4	71,000	0·56	40,000
Mixed grains	1931	21,903	32·5	712,000	0·33	235,000
	1932	23,800	34·5	821,000	0·34	279,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	54,272	90·0	4,884,000	0·25	1,221,000
	1932	37,500	85·0	3,188,000	0·52	1,658,000
Turnips, etc	1931	8,512	211·0	1,796,000	0·20	359,000
	1932	8,900	300·0	2,670,000	0·22	587,000
			tons	tons	per ton	
Hay and clover	1931	234,477	1·55	363,000	9·00	3,267,000
	1932	226,300	1·40	317,000	7·50	2,378,000
Fodder corn	1931	237	7·00	1,700	4·50	7,700
	1932	300	6·60	2,000	3·25	7,000
Nova Scotia—			bush.	bush.	per bush.	
Spring wheat	1931	2,927	17·1	50,000	0·88	44,000
	1932	3,300	21·6	71,000	0·77	55,000
Oats	1931	83,743	34·7	2,906,000	0·50	1,453,000
	1932	85,100	35·4	3,013,000	0·46	1,386,000
Barley	1931	7,672	28·8	221,000	0·63	139,000
	1932	7,900	29·0	229,000	0·59	135,000

6.—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932—continued.

Field Crop.	Year.	Area.	Yield	Total Yield.	Average Price.	Total Value.
		acres.	bush. per acre.	bush.	$ per bush.	$
Nova Scotia—concluded.						
Buckwheat	1931	4,041	21·9	88,400	0·78	69,000
	1932	4,100	24·2	99,000	0·68	67,000
Mixed grains	1931	3,878	33·5	130,000	0·50	65,000
	1932	4,800	35·6	171,000	0·55	94,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	21,394	91·0	1,946,000	0·50	973,000
	1932	20,600	103·0	2,122,000	0·70	1,485,000
Turnips, etc	1931	8,795	255·0	2,242,000	0·30	673,000
	1932	9,500	271·0	2,575,000	0·47	1,210,000
			tons	tons	per ton	
Hay and clover	1931	375,287	1·77	664,000	10·00	6,640,000
	1932	400,200	1·80	720,000	8·00	5,760,000
Fodder corn	1931	532	9·70	5,200	6·00	31,000
	1932	500	8·75	4,400	3·25	14,000
New Brunswick—			bush.	bush.	per bush.	
Spring wheat	1931	7,673	18·5	142,000	0·86	122,000
	1932	11,300	17·7	200,000	0·88	176,000
Oats	1931	216,516	31·0	6,718,000	0·38	2,553,000
	1932	216,500	31·3	6,776,000	0·33	2,236,000
Barley	1931	9,845	28·9	284,600	0·53	151,000
	1932	12,000	27·7	332,000	0·53	176,000
Beans	1931	826	18·2	15,000	1·95	29,000
	1932	1,000	17·5	18,000	1·25	23,000
Buckwheat	1931	41,637	17·2	714,600	0·60	429,000
	1932	42,100	20·5	863,000	0·55	475,000
Mixed grains	1931	1,938	28·8	56,000	0·40	22,000
	1932	4,300	30·2	130,000	0·43	56,000
			cwt.	cwt.	per cwt.	$
Potatoes	1931	59,263	107·0	6,341,000	0·25	1,585,000
	1932	48,200	80·0	3,856,000	0·50	1,928,000
Turnips, etc	1931	8,898	247·0	2,198,000	0·20	440,000
	1932	10,300	250·0	2,575,000	0·40	1,030,000
			tons	tons	per ton	
Hay and clover	1931	457,571	1·66	760,000	7·00	5,320,000
	1932	561,200	1·57	881,000	7·40	6,519,000
Fodder corn	1931	526	7·00	3,700	5·25	19,000
	1932	600	5·40	3,200	3·25	10,000
Quebec—			bush.	bush.	per bush.	
Spring wheat	1931	40,499	19·7	798,000	0·77	614,000
	1932	52,000	18·3	952,000	0·73	695,000
Oats	1931	1,680,525	28·1	47,223,000	0·38	17,945,000
	1932	1,735,500	29·4	51,024,000	0·36	18,369,000
Barley	1931	95,279	25·7	2,449,000	0·56	1,371,000
	1932	114,300	25·7	2,938,000	0·53	1,557,000
Spring rye	1931	5,456	15·7	86,000	0·70	60,000
	1932	6,200	15·8	98,000	0·68	67,000
Peas	1931	18,200	15·5	282,000	1·46	412,000
	1932	19,300	16·6	320,000	1·43	458,000
Beans	1931	6,200	18·9	117,000	1·82	213,000
	1932	2,200	16·5	36,000	1·55	56,000

6.—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932—continued.

Field Crop.	Year.	Area.	Yield.	Total Yield.	Average Price.	Total Value.
		acres.	bush. per acre.	bush.	$ per bush.	$
Quebec—concluded.						
Buckwheat	1931	106,200	22·2	2,358,000	0·58	1,368,000
	1932	116,900	23·9	2,794,000	0·48	1,341,000
Mixed grains	1931	107,903	24·9	2,687,000	0·52	1,397,000
	1932	99,000	30·4	3,010,000	0·46	1,384,000
Flaxseed	1931	1,529	10·2	16,000	2·01	32,000
	1932	1,400	9·9	14,000	1·83	25,000
Corn, husking	1931	7,200	25·4	183,000	0·92	168,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	144,400	117·0	16,897,000	0·51	8,617,000
	1932	132,500	87·0	11,475,000	0·63	7,229,000
Turnips, etc	1931	27,900	238·0	6,640,000	0·43	2,855,000
	1932	33,300	264·0	8,778,000	0·37	3,248,000
			tons.	tons.	per ton.	
Hay and clover	1931	3,404,866	1·65	5,618,000	6·50	36,517,000
	1932	3,455,100	1·40	4,837,000	7·10	34,343,000
Alfalfa	1931	10,800	3·00	32,000	8·35	267,000
	1932	13,400	2·50	33,500	8·51	285,000
Fodder corn	1931	47,400	9·90	469,000	3·50	1,642,000
	1932	51,000	9·75	497,000	2·67	1,325,000
Ontario—			bush.	bush.	per bush.	
Fall wheat	1931	526,136	28·9	15,205,000	0·52	7,907,000
	1932	536,000	28·1	15,062,000	0·46	6,929,000
Spring wheat	1931	99,575	20·5	2,041,000	0·52	1,061,000
	1932	100,000	19·9	1,990,000	0·45	896,000
All wheat	1931	625,711	27·6	17,246,000	0·52	8,968,000
	1932	636,000	26·8	17,052,000	0·46	7,825,000
Oats	1931	2,343,884	33·5	78,520,000	0·25	19,630,000
	1932	2,338,000	32·3	75,517,000	0·25	18,879,000
Barley	1931	439,483	30·7	13,492,000	0·37	4,992,000
	1932	456,000	30·2	13,771,000	0·36	4,958,000
Fall rye	1931	56,398	17·7	998,000	0·42	419,000
	1932	57,500	17·8	1,024,000	0·37	379,000
Peas	1931	60,175	16·6	999,000	0·63	629,000
	1932	59,500	18·0	1,071,000	0·65	696,000
Beans	1931	73,833	15·6	1,152,000	0·58	668,000
	1932	62,000	17·1	1,060,000	0·49	519,000
Buckwheat	1931	178,093	20·5	3,651,000	0·42	1,533,000
	1932	197,000	22·9	4,511,000	0·35	1,579,000
Mixed grains	1931	999,568	34·7	34,685,000	0·36	12,487,000
	1932	986,000	33·8	33,327,000	0·33	10,998,000
Flaxseed	1931	7,065	10·7	76,000	1·05	80,000
	1932	6,300	9·8	62,000	0·90	56,000
Corn, husking	1931	124,495	42·3	5,266,000	0·40	2,106,000
	1932	130,000	38·9	5,057,000	0·45	2,276,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	169,604	71·0	12,042,000	0·39	4,696,000
	1932	156,000	61·0	9,516,000	0·69	6,566,000
Turnips, etc	1931	87,431	172·0	15,038,000	0·20	3,008,000
	1932	100,000	193·0	19,300,000	0·16	3,088,000

6.—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932—continued.

Field Crop.	Year.	Area.	Yield.	Total Yield.	Average Price.	Total Value.
					$	$
Ontario—concluded.		acres.	tons per acre.	tons.	per ton.	
Hay and clover	1931	3,162,478	1·66	5,250,000	8·22	43,155,000
	1932	3,194,000	1·65	5,270,000	7·02	36,995,000
Alfalfa	1931	431,525	2·50	1,079,000	10·00	10,790,000
	1932	528,000	2·66	1,404,000	8·21	11,527,000
Fodder corn	1931	266,859	8·67	2,314,000	4·00	9,256,000
	1932	285,000	7·72	2,200,000	2·65	5,830,000
Sugar beets	1931	38,047	9·30	354,000	6·00	2,124,000
	1932	33,000	10·00	330,000	5·25	1,733,000
Manitoba—			bush.	bush.	per bush.	
Spring wheat	1931	2,540,000	11·1	28,112,000	0·41	11,526,000
	1932	2,651,000	16·0	42,400,000	0·34	14,416,000
Oats	1931	1,495,944	17·0	25,500,000	0·19	4,845,000
	1932	1,463,500	25·2	36,826,000	0·14	5,156,000
Barley	1931	1,112,863	13·8	15,400,000	0·21	3,234,000
	1932	1,123,300	17·8	20,014,000	0·17	3,402,000
Fall rye	1931	33,799	14·2	480,000	0·24	115,000
	1932	30,100	13·8	415,000	0·18	75,000
Spring rye	1931	15,329	11·8	181,000	0·24	43,000
	1932	10,500	13·8	145,000	0·18	26,000
All rye	1931	49,128	13·4	661,000	0·24	158,000
	1932	40,600	13·8	560,000	0·18	101,000
Peas	1931	750	16·0	12,000	1·05	13,000
	1932	2,000	14·0	28,000	0·60	17,000
Buckwheat	1931	3,500	15·8	55,000	0·55	30,000
	1932	5,700	15·0	86,000	0·44	38,000
Mixed grains	1931	11,324	20·5	232,000	0·21	49,000
	1932	17,000	22·1	376,000	0·19	71,000
Flaxseed	1931	97,562	3·6	350,000	0·81	284,000
	1932	49,300	4·9	240,000	0·57	137,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	37,300	75·0	2,800,000	0·38	1,064,000
	1932	32,400	59·0	1,912,000	0·63	1,205,000
Turnips, etc	1931	2,450	118·0	289,000	0·44	127,000
	1932	4,400	102·0	448,000	0·53	237,000
			tons.	tons.	per ton.	
Hay and clover	1931	294,888	1·40	413,000	7·75	3,201,000
	1932	448,000	1·53	683,000	5·50	3,757,000
Alfalfa	1931	10,900	1·70	19,000	10·00	190,000
	1932	16,200	1·70	27,000	8·50	230,000
Fodder corn	1931	7,500	3·70	28,000	4·50	126,000
	1932	13,400	4·20	57,000	3·75	214,000
Saskatchewan—			bush.	bush.	per bush.	
Spring wheat	1931	14,961,000	8·9	132,466,000	0·38	50,337,000
	1932	15,543,000	13·0	202,000,000	0·30	60,600,000
Oats	1931	4,368,735	15·5	67,700,000	0·18	12,186,000
	1932	4,364,700	24·6	107,400,000	0·11	11,814,000
Barley	1931	1,366,092	10·5	14,340,000	0·21	3,011,000
	1932	1,329,500	17·6	23,400,000	0·13	3,042,000

6—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932—continued.

Field Crop.	Year.	Area.	Yield.	Total Yield.	Average Price.	Total Value.
		acres.	bush. per acre.	bush.	$ per bush.	$
Saskatchewan—concluded.						
Fall rye	1931	415,152	4·3	1,785,000	0·23	411,000
	1932	405,200	10·6	4,300,000	0·14	602,000
Spring rye	1931	95,410	6·4	611,000	0·23	141,000
	1932	77,300	11·5	890,000	0·14	125,000
All rye	1931	510,562	4·7	2,396,000	0·23	552,000
	1932	482,500	10·8	5,190,000	0·14	727,000
Peas	1931	400	6·0	2,400	1·00	2,400
	1932	500	11·0	5,500	0·60	3,300
Beans	1931	100	5·6	600	1·20	700
	1932	100	9·0	900	0·72	600
Mixed grains	1931	20,165	12·0	242,000	0·19	46,000
	1932	20,800	16·8	349,000	0·11	38,000
Flaxseed	1931	492,168	3·7	1,820,000	0·77	1,401,000
	1932	381,200	5·2	1,980,000	0·50	990,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	41,732	58·00	2,420,000	0·51	1,234,000
	1932	44,000	67·00	2,948,000	0·50	1,474,000
Turnips, etc	1931	1,150	43·0	49,000	0·55	27,000
	1932	2,100	72·0	151,000	0·50	76,000
			tons.	tons.	per ton.	
Hay and clover	1931	171,538	1·17	201,000	7·10	1,427,000
	1932	150,000	1·46	219,000	4·74	1,038,000
Alfalfa	1931	6,900	1·32	9,000	9·00	81,000
	1932	9,400	2·45	23,000	8·00	184,000
Fodder corn	1931	5,700	1·56	9,000	4·70	42,000
	1932	6,100	2·46	15,000	4·00	60,000
Alberta—			bush. per acre.	bush.	per bush.	
Spring wheat	1931	7,938,000	17·7	140,603,000	0·36	50,617,000
	1932	8,201,000	20·0	164,000,000	0·27	44,280,000
Oats	1931	2,447,288	37·0	90,500,000	0·18	16,290,000
	1932	2,704,800	37·5	101,500,000	0·11	11,165,000
Barley	1931	723,772	28·7	20,800,000	0·21	4,368,000
	1932	701,300	28·1	19,700,000	0·12	2,364,000
Fall rye	1931	93,162	6·5	610,000	0·22	134,000
	1932	121,100	11·5	1,393,000	0·13	181,000
Spring rye	1931	58,857	8·3	490,000	0·22	108,000
	1932	62,000	9·6	595,000	0·13	77,000
All rye	1931	152,019	7·2	1,100,000	0·22	242,000
	1932	183,100	10·9	1,988,000	0·13	258,000
Peas	1931	400	15·0	6,000	1·50	9,000
	1932	400	16·0	6,000	0·60	4,000
Beans	1931	500	11·0	5,500	1·20	6,600
	1932	500	11·8	6,000	0·70	4,000
Mixed grains	1931	17,909	33·2	595,000	0·19	113,000
	1932	25,300	28·9	731,000	0·14	102,000
Flaxseed	1931	28,831	6·9	200,000	0·72	144,000
	1932	15,200	9·7	147,000	0·49	72,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	35,596	78·0	2,776,000	0·42	1,166,000
	1932	31,000	68·0	2,102,000	0·64	1,345,000

6.—Areas, Yields and Values of Principal Field Crops in Canada, Itemized by Provinces, 1931 and 1932—concluded

Field Crop.	Year.	Area.	Yield.	Total Yield.	Average Price.	Total Value.
		acres.	cwt. per acre.	cwt.	$ per cwt.	$
Alberta—concluded.						
Turnips, etc.	1931	1,700	126·0	214,000	0·30	64,000
	1932	1,800	115·0	207,000	0·64	132,000
			tons.	tons.	per ton.	
Hay and clover	1931	287,721	1·37	394,000	7·50	2,955,000
	1932	231,300	1·54	356,000	6·50	2,314,000
Alfalfa	1931	56,650	2·19	124,000	10·00	1,240,000
	1932	56,800	2·45	139,000	8·00	1,112,000
Fodder corn	1931	3,600	3·55	13,000	4·00	52,000
	1932	4,500	5·81	26,000	3·50	91,000
Grain hay	1931	1,750,000	2·00	3,500,000	6·00	21,000,000
	1932	1,850,000	1·75	3,238,000	6·00	19,428,000
Sugar beets	1931	11,950	8·33	100,000	6·50	650,000
	1932	12,000	10·00	120,000	5·50	660,000
British Columbia—			bush.	bush.	per bush.	
Fall wheat	1931	11,522	23·4	270,000	0·66	178,000
Spring wheat	1931	53,305	24·6	1,310,000	0·66	865,000
	1932	61,200	23·0	1,408,000	0·55	774,000
All wheat	1931	64,827	24·4	1,580,000	0·66	1,043,000
	1932	61,200	23·0	1,408,000	0·55	774,000
Oats	1931	85,647	51·5	4,411,000	0·38	1,676,000
	1932	90,800	48·7	4,422,000	0·32	1,415,000
Barley	1931	9,531	32·6	311,000	0·50	156,000
	1932	9,300	31·0	288,000	0·41	118,000
Spring rye	1931	3,971	20·3	81,000	0·55	45,000
	1932	3,900	20·0	78,000	0·41	32,000
Peas	1931	2,715	25·1	68,000	1·40	95,000
	1932	3,100	28·5	88,000	1·25	110,000
Beans	1931	650	21·5	14,000	1·70	24,000
	1932	800	24·5	20,000	1·30	26,000
Mixed grains	1931	2,289	40·1	92,000	0·42	39,000
	1932	3,000	40·3	121,000	0·38	46,000
Flaxseed	1931	275	11·2	3,000	1·00	3,000
	1932	300	11·0	3,000	0·60	2,000
			cwt.	cwt.	per cwt.	
Potatoes	1931	20,365	108·0	2,199,000	0·82	1,803,000
	1932	19,300	119·0	2,297,000	0·66	1,516,000
Turnips, etc.	1931	4,063	228·0	926,000	0·60	556,000
	1932	4,500	236·0	1,062,000	0·52	552,000
			tons.	tons.	per ton.	
Hay and clover	1931	143,543	2·07	297,000	13·00	3,861,000
	1932	145,500	1·90	276,000	11·50	3,174,000
Alfalfa	1931	40,585	3·08	125,000	14·50	1,813,000
	1932	42,300	3·25	137,000	12·75	1,747,000
Fodder corn	1931	3,838	10·55	40,000	6·00	240,000
	1932	4,200	12·61	53,000	6·00	318,000
Grain hay	1931	50,000	2·25	113,000	10·00	1,130,000
	1932	49,500	2·10	104,000	8·50	884,000

Acreages under Pasture.—Table 7 gives the estimated acreages under pasture in Canada, by provinces, for the years 1926 to 1932.

7.—Estimated Acreages under Pasture in Canada, 1926-32.

Province.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.
P.E. Island	242,157	249,637	250,092	244,729	246,592	235,000	210,200
Nova Scotia	870,305	843,766	866,100	866,204	866,818	866,500	704,100
New Brunswick	467,081	492,425	500,772	487,840	490,500	474,600	518,300
Quebec	3,672,360	3,745,807	3,858,181	3,944,443	3,950,000	3,686,100	2,669,600
Ontario	3,077,424	3,012,786	3,000,172	3,134,614	3,149,460	3,031,717	3,012,500
Manitoba	222,039	240,485	252,689	253,950	264,300	239,800	232,100
Saskatchewan	382,403	426,927	408,670	406,100	419,000	400,300	444,900
Alberta	288,962	285,719	289,973	319,338	396,400	384,900	350,500
British Columbia	53,719	56,141	62,192	63,865	66,604	69,272	76,500
Indian Reserves	31,990	36,601	39,202	47,237	39,839	39,913	46,000
Totals	**9,308,440**	**9,390,294**	**9,528,043**	**9,768,320**	**9,889,513**	**9,428,102**	**8,264,700**

The above figures are not entirely comprehensive since the figures for the four western provinces are "seeded pasture" only. Most of the area used for pasture in these provinces is "natural" and data on land used in this way can only be properly secured by the quinquennial census. At the 1926 census, the acreages of improved and natural pasture in the three Prairie Provinces were as follows:—

Province.	Improved Pasture.	Natural Pasture.
	acres.	acres.
Manitoba	311,818	3,553,590
Saskatchewan	305,164	13,612,460
Alberta	302,417	12,210,315

The figures for the Maritime Provinces, Quebec and Ontario include all pasture, seeded and natural.

The areas under grazing leases in the Western Provinces as at Mar. 31, 1932, are reported by the Provincial Lands Administration Branches as follows:—

Province.	Leases.	Area.
	No.	acres.
Manitoba	245	103,314
Saskatchewan	86,923	3,731,668
Alberta	3,948	3,367,150
British Columbia	732	64,153
Totals	**91,848**	**7,266,285**

Average Yields per Acre.—Table 8 gives, for the years 1925 to 1932, the average yields per acre of the various field crops, together with the long-time average yields per acre.

8.—Annual Average Yields per Acre of Field Crops for Canada, 1925-32, with Long-time Averages.

Field Crop.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	Long-time Average.
	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Wheat	19·0	17·8	21·4	23·5	12·1	16·9	12·3	15·8	17·1
Oats	32·0	30·1	33·2	34·4	22·7	31·9	25·5	29·8	32·3
Barley	24·7	27·4	27·7	27·9	17·3	24·3	17·9	21·5	25·2
Rye	14·2	16·2	20·9	17·4	13·3	15·2	6·8	11·6	16·1
Peas	18·6	18·2	18·5	16·8	15·8	18·3	16·6	17·9	16·9
Beans	18·4	16·2	15·5	16·7	17·3	14·6	15·9	17·1	16·8
Buckwheat	22·2	21·6	23·1	21·7	20·3	22·2	20·6	22·9	22·4
Mixed grains	38·5	35·5	37·5	35·3	32·0	36·9	33·2	33·0	34·6
Flaxseed	7·4	8·1	10·3	9·6	5·4	8·7	3·9	5·4	8·8
Corn for husking	44·2	37·3	32·4	37·7	34·1	36·1	41·4	38·9	49·3
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes	77·0	89·7	81·2	83·8	73·4	84·4	90·0	76·0	89·0
Turnips, etc	182·2	172·9	188·9	215·5	176·3	181·8	195·0	216·0	189·0
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover	1·6	1·5	1·7	1·6	1·5	1·5	1·6	1·5	1·5
Fodder corn	9·1	8·8	7·5	8·3	7·9	8·2	8·6	7·8	9·0
Sugar beets	10·6	11·2	8·9	8·4	8·4	9·0	9·1	10·0	9·4
Alfalfa	2·5	2·5	2·4	2·4	2·3	2·2	2·5	2·7	2·4

Grain Yields of the Prairie Provinces.—Final estimates of the acreages and yields of the grain crops of the Prairie Provinces (Manitoba, Saskatchewan and Alberta) are given for 1932 in Table 9, together with comparative data for 1931 and 1930.

9.—Areas and Yields of Wheat, Oats, Barley, Rye and Flaxseed in the Prairie Provinces 1930-32.

Province and Crop.	Areas.			Yields.		
	1930.[1]	1931.	1932.	1930.	1931.	1932.
	acres.	acres.	acres.	bush.	bush.	bush.
Prairie Provinces—						
Wheat	24,764,000	25,439,000	26,395,000	397,300,000	301,181,000	408,400,000
Oats	7,314,000	8,311,967	8,533,000	254,011,000	183,700,000	245,726,000
Barley	4,398,000	3,202,727	3,154,100	109,495,000	50,540,000	63,114,000
Rye	1,106,000	711,709	706,200	20,641,000	4,157,000	7,738,000
Flaxseed	649,000	618,561	445,700	4,963,000	2,370,000	2,367,000
Manitoba—						
Wheat	2,150,000	2,540,000	2,651,000	43,600,000	28,112,000	42,400,000
Oats	1,338,000	1,495,944	1,463,500	50,562,000	25,500,000	36,826,000
Barley	1,782,000	1,112,863	1,123,300	49,974,000	15,400,000	20,014,000
Rye	87,000	49,128	40,600	2,052,000	661,000	560,000
Flaxseed	93,000	97,562	49,300	728,000	350,000	240,000
Saskatchewan—						
Wheat	14,684,000	14,961,000	15,543,000	206,700,000	132,466,000	202,000,000
Oats	3,798,000	4,368,735	4,364,700	125,509,000	67,700,000	107,400,000
Barley	1,902,000	1,366,092	1,329,500	40,522,000	14,340,000	23,400,000
Rye	819,000	510,562	482,500	14,875,000	2,396,000	5,190,000
Flaxseed	522,000	492,168	381,200	3,900,000	1,820,000	1,980,000
Alberta—						
Wheat	7,930,000	7,938,000	8,201,000	147,000,000	140,603,000	164,000,000
Oats	2,178.000	2,447,288	2,704,800	77,940,000	90,500,000	101,500,000
Barley	714,000	723,772	701,300	18,999,000	20,800,000	19,700,000
Rye	200,000	152,019	183,100	3,714,000	1,100,000	1,988,000
Flaxseed	34,000	28,831	15,200	335,000	200,000	147,000

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[1] Based on preliminary compilations of the decennial census.

Stocks of Grain in Canada.—Table **10** shows the quantities of grain in farmers' hands on July 31, 1932, as compared with July 31, 1931 and 1930. Adding the stocks in the elevators and flour mills, Table **11** shows the total quantities of grain in store at the close of each of the crop years ended July 31, 1930, 1931 and 1932.

10.—Stocks of Grain in Farmers' Hands on July 31, 1932, as Compared with July 31, 1931 and 1930, with Total Production for the Previous Years.

Kind of Grain.	Total Production in 1929.	In Farmers' Hands, July 31, 1930.		Total Production in 1930.	In Farmers' Hands, July 31, 1931.		Total Production in 1931.	In Farmers' Hands, July 31, 1932.	
	000 bush.	p.c.	bush.	000 bush.	p.c.	bush.	000 bush.	p.c.	bush.
Canada—									
Wheat	304,520	1·75	5,326,000	420,672	4·63	19,459,400	321,325	2·33	7,495,800
Oats	282,838	4·25	12,020,000	423,148	12·43	52,603,500	328,278	6·95	22,823,000
Barley	102,313	2·98	3,050,000	135,160	13·03	17,618,400	67,383	5·16	3,477,000
Rye	13,161	1·26	166,000	22,019	6·37	1,403,600	5,322	2·74	146,000
Flaxseed	2,060	0·17	3,600	5,069	0·71	35,800	2,465	0·29	7,100

11.—Detailed Stocks of Grain in Canada on July 31, 1930, 1931 and 1932.

Quantities in—	Wheat.			Oats.		
	July 31, 1930.	July 31, 1931.	July 31, 1932.	July 31, 1930.	July 31, 1931.	July 31, 1932.
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' hands	5,326,000	19,459,400	7,495,800	12,020,000	52,603,500	22,823,000
Country, private and mill elevators and mills in Western Division	16,820,322	34,149,352[1]	33,508,492[1]	2,581,324	4,672,977[1]	1,464,029[1]
Terminal elevators in Western Inspection Division	47,892,399	56,710,132	60,781,336	1,802,928	2,327,038	3,209,412
Eastern elevators	21,374,632	14,344,612	17,839,890	2,785,443	1,786,218	1,335,807
Flour mills	6,902,393	2,138,330[2]	2,000,000[2]	1,471,070	761,097[2]	600,000[2]
Transit	12,779,166	7,277,137	9,323,383	922,015	1,281,159	540,076
Totals	**111,094,912**	**134,078,963**	**130,948,901**	**21,582,780**	**63,431,989**	**29,972,324**
	Barley.			Rye.		
Farmers' hands	3,050,000	17,618,400	3,477,000	166,000	1,403,600	146,000
Country, private and mill elevators and mills in Western Division	2,671,951	2,507,566[1]	1,350,453[1]	543,093	1,271,857[1]	532,663[1]
Terminal elevators	13,818,834	6,582,571	1,441,804	5,416,868	9,025,628	2,550,290
Eastern elevators	1,856,514	1,070,315	369,709	1,561,892	1,849,404	1,535,827
Flour mills	94,882	85,298[2]	45,000[2]	1,646	18,572[2]	–
Transit	1,383,251	1,597,566	477,954	1,501,206	866,734	616,099
Totals	**22,875,432**	**29,461,716**	**7,161,920**	**9,190,705**	**14,435,795**	**5,380,879**
				Flaxseed.		
Farmers' hands				3,600	35,800	7,100
Country, private and mill elevators and mills in Western Division				48,853	235,130[1]	173,379[1]
Terminal elevators				486,895	482,846	1,041,394
Eastern elevators				–	16,620	33,790
Transit				97,310	63,558	65,695
Totals				**636,658**	**833,954**	**1,321,358**

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[1] Changes in the designations of elevators and mills between the taking of the 1930 and 1931 stocks result in the stocks of grain in mills and mill elevators in the Western Inspection Division being reported under this heading in 1931 and 1932, whereas they appeared under "flour mills" in 1930. [2] Eastern Inspection Division only, estimated for 1932.

Distribution of Wheat and Oat Crops.—The distribution of the wheat crop of Canada for the years ended July 31, 1931 and 1932, is calculated in Table **12.**

12.—Distribution of the Canadian Wheat Crops, by crop years, 1930-31 and 1931-32.

NOTE.—Flour is expressed as wheat on the basis of one barrel of flour, weighing 196 lb., being equal to 4⅓ bushels of wheat. For similar calculations extending over a series of years both for wheat and oats, see the Year Book, 1920, pp. 263-266, and the April issues of the Monthly Bulletin of Agricultural Statistics for each of the years 1920 to 1933.

Item.	Crop year ended July 31, 1931.	Crop year ended July 31, 1932.	Item.	Crop year ended July 31, 1931.	Crop year ended July 31, 1932.
	000 bush.	000 bush.		000 bush.	000 bush.
Carry-over, Aug. 1, 1930 and Aug. 1, 1931	111,095	134,079	Exports as grain	228,536	182,803
Gross production	420,672	321,325	Exports as flour	30,157	24,226
Loss in cleaning	7,740	5,976	Total exports	258,693	207,029
Grain not merchantable	4,510	2,826	Retained as seed	39,172	36,888
Net production and carry-over	519,517	446,602	Retained for feed	40,690	26,502
Imports	244	216	Milled for food	41,916	41,750
Available for distribution	519,761	446,818	Carry-over July 31, 1931 and July 31, 1932	134,079	130,949
			Balance otherwise disposed of	5,211	3,700

Table **13** presents similar data for oats. The bulk of this crop is consumed as feed for live stock and the table shows approximately how the remaining portion of the crop is disposed of, including: the quantities exported as grain, oatmeal and rolled oats; the quantity retained for seed; and the quantity milled for home consumption, representing chiefly oatmeal and rolled oats used for human food. The carry-over represents grain in the elevators, in farmers' hands, in transit, etc., and the balance is the quantity used in Canada for feeding to live stock, this amount being estimated at 323,694,000 bushels in 1930-31 and 297,526,000 bushels in 1931-32.

13.—Distribution of the Canadian Oat Crops, by crop years, 1930-31 and 1931-32.

Item.	Crop year ended July 31, 1931.	Crop year ended July 31, 1932.	Item.	Crop year ended July 31, 1931.	Crop year ended July 31, 1932.
	000 bush.	000 bush.		000 bush.	000 bush.
Carry-over, Aug. 1, 1930 and Aug. 1, 1931	21,583	63,432	Exports as meal, etc.	3,494	4,718
Gross production	423,148	328,278	Total exports	11,316	18,329
Grain not merchantable	6,898	8,044	Retained as seed	32,178	32,871
Net production and carry-over	437,833	383,666	Milled for home consumption	7,923	6,904
Imports	710	1,936	Carry-over July 31, 1931 and July 31, 1932	63,432	29,972
Available for distribution	438,543	385,602	Balance for home consumption as grain	323,694	297,526
Exports as grain	7,822	13,611			

Per Capita Consumption of Wheat in Canada.—According to revised calculations, the average per capita consumption of wheat ground for human food in Canada during the ten years 1922 to 1931 was 4·4 bushels. The average range for the period was between 4·0 and 4·5 bushels. The average consumption in 1931 was estimated at 4·0 bushels. Details for the years 1919-27 were given at p. 241 of the 1929 Year Book, while annual estimates are published in the April number of the Monthly Bulletin of Agricultural Statistics.

Subsection 3.—Farm Live Stock and Poultry.

The growth of the live-stock and poultry industries in Canada from decade to decade is indicated in summary statistical form in Table **14**, while some authoritative details will be found in the article "The Development of Agriculture in Canada", contributed by Dr. J. H. Grisdale to the 1921 Year Book, where it appears at pp. 202-210.

14.—Summary Statistics of the Numbers of Live Stock and Poultry on Farms in the Dominion of Canada, Censuses of 1871-1931.

	1871.	1881.	1891.	1901.	1911.	1921.[2]	1931.
	No.	No.	No.	No.	No.	No.	No.
Horses	836,743	1,059,358	1,470,572	1,577,493	2,598,958	3,610,494	3,113,909
Cattle	2,624,290	3,433,989	4,120,586	5,576,451	6,526,083	8,519,484	7,973,031
Sheep	3,155,509	3,048,678	2,563,781	2,510,239	2,174,300	3,203,966	3,627,116
Swine	1,366,083	1,207,619	1,733,850	2,353,828	3,634,778	3,040,730	4,699,831
All poultry	–	–	14,105,102[1]	17,922,658	31,793,261	50,325,248	65,184,689
Hens and chickens	–	–	12,696,701	16,651,337	29,773,457	48,021,647	61,277,229
Turkeys	–	–	458,306	584,569	863,182	1,096,721	2,223,197
Ducks	–	–	320,169	290,755	527,098	603,152	749,930
Geese	–	–	537,932	395,997	629,524	603,728	902,251
Hives of bees	144,791	–	199,288	189,986	180,372	185,530	215,349

[1] Includes 91,994 unspecified. [2] Includes live stock elsewhere than on farms as follows: horses 158,742, cattle 149,995, sheep 3,499, swine 80,439, poultry 6,978,054, hives 37,425.

15.—Estimated Numbers and Values of Farm Live Stock in Canada, by Provinces, 1929-32.

Province and Item.	1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	000 $	000 $	000 $	000 $
Canada—								
Horses	3,376,487	3,295,000	3,128,996	3,088,630	235,971	202,013	155,908	141,640
Milch cows	3,684,766	3,683,000	3,365,000	3,624,600	273,817	218,822	143,166	116,349
Other cattle	5,139,866	5,254,000	4,626,000	4,886,500	239,713	182,263	114,828	83,685
Totals, cattle	8,824,632	8,937,000	7,991,000	8,511,100	513,530	401,085	257,994	200,034
Sheep	3,635,923	3,696,000	3,608,000	3,644,500	36,118	25,275	18,596	12,084
Swine	4,381,725	4,000,000	4,716,720	4,639,100	71,111	58,852	32,773	21,964
Totals	–	–	–	–	**856,730**	**687,225**	**465,271**	**375,722**
P. E. Island—								
Horses	33,241	35,570	29,582	29,360	3,202	3,272	2,189	1,644
Milch cows	44,728	43,200	44,000	44,900	2,728	2,290	1,540	1,347
Other cattle	51,881	56,300	55,000	57,900	1,920	1,802	1,210	869
Totals, cattle	96,609	99,500	99,000	102,800	4,648	4,092	2,750	2,216
Sheep	97,367	87,000	76,000	68,000	844	609	304	214
Swine	54,285	54,000	40,007	41,500	894	864	280	215
Totals	–	–	–	–	**9,588**	**8,837**	**5,523**	**4,289**
Nova Scotia—								
Horses	52,104	51,530	44,579	42,720	5,321	5,050	3,834	3,418
Milch cows	141,207	140,000	108,000	112,800	8,324	7,280	4,536	3,835
Other cattle	145,199	144,900	113,000	125,900	5,510	4,637	2,825	2,518
Totals, cattle	286,406	284,900	221,000	238,700	13,834	11,917	7,361	6,353
Sheep	277,761	289,600	195,000	155,700	2,020	1,738	975	575
Swine	47,458	43,600	43,668	53,400	901	741	437	434
Totals	–	–	–	–	**22,076**	**19,446**	**12,607**	**10,780**

15.—Estimated Numbers and Values of Farm Live Stock in Canada, by Provinces, 1929-32—concluded.

Province and Item.	1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	000 $	000 $	000 $	000 $
New Brunswick—								
Horses	50,199	49,800	52,902	52,930	5,723	5,030	5,079	4,234
Milch cows	105,667	107,300	101,000	109,300	6,129	5,258	3,838	3,607
Other cattle	109,919	121,700	113,000	111,700	3,517	3,651	2,486	1,899
Totals, cattle	215,586	229,000	214,000	221,000	9,646	8,909	6,324	5,506
Sheep	151,257	153,300	143,000	131,000	1,210	920	572	468
Swine	66,467	67,400	84,737	96,300	1,396	1,213	847	849
Totals	-	-	-	-	**17,975**	**16,072**	**12,822**	**11,057**
Quebec—								
Horses	369,060	367,200	304,537	297,410	39,084	34,708	26,495	26,767
Milch cows	1,055,770	1,023,700	892,000	932,800	73,904	55,302	33,896	27,984
Other cattle	953,627	995,000	828,000	944,100	36,466	29,611	17,388	12,273
Totals, cattle	2,009,397	2,018,700	1,720,000	1,876,900	110,370	84,913	51,284	40,257
Sheep	865,000	870,800	732,000	751,400	7,785	5,609	4,392	2,254
Swine	803,644	702,800	725,398	667,300	15,213	11,240	7,254	4,671
Totals	-	-	-	-	**172,452**	**136,470**	**89,425**	**73,949**
Ontario—								
Horses	606,505	606,700	578,333	578,000	57,277	49,151	41,640	36,414
Milch cows	1,237,248	1,222,500	1,098,000	1,175,000	105,109	80,919	52,704	39,950
Other cattle	1,434,346	1,453,100	1,390,000	1,354,000	76,099	56,671	40,310	27,080
Totals, cattle	2,671,594	2,675,600	2,488,000	2,529,000	181,208	137,590	93,014	67,030
Sheep	1,130,395	1,134,400	1,035,000	1,040,000	13,355	8,795	6,210	4,077
Swine	1,681,263	1,661,500	1,379,943	1,375,000	25,880	22,857	11,040	7,219
Totals	-	-	-	-	**277,720**	**218,393**	**151,904**	**114,740**
Manitoba—								
Horses	361,111	359,900	326,529	341,500	23,084	18,784	13,714	12,977
Milch cows	222,672	251,500	237,000	257,000	15,325	13,502	9,006	7,453
Other cattle	461,782	483,800	441,000	477,500	21,490	16,260	10,143	7,640
Totals, cattle	684,454	735,300	678,000	734,500	36,815	29,762	19,149	15,093
Sheep	182,240	223,400	214,000	199,100	1,756	1,299	856	561
Swine	295,330	271,700	387,646	337,900	4,817	3,896	2,326	1,352
Totals	-	-	-	-	**66,472**	**53,741**	**36,045**	**29,983**
Saskatchewan—								
Horses	1,117,362	1,071,800	1,004,156	963,000	62,572	53,590	36,150	32,742
Milch cows	420,004	429,000	424,000	453,600	27,300	24,882	16,536	13,154
Other cattle	746,909	785,900	764,000	874,000	33,611	25,149	16,808	13,984
Totals, cattle	1,166,913	1,214,900	1,188,000	1,327,600	60,911	50,031	33,344	27,138
Sheep	207,551	209,900	279,000	313,700	1,868	1,259	1,116	941
Swine	599,909	497,900	940,436	898,000	9,599	7,966	4,702	3,143
Totals	-	-	-	-	**134,950**	**112,846**	**75,312**	**63,964**
Alberta—								
Horses	733,133	698,700	731,999	726,010	35,568	28,554	23,424	20,328
Milch cows	345,566	348,200	385,000	424,000	25,598	20,334	16,170	13,144
Other cattle	944,434	939,900	752,000	799,600	45,928	32,999	18,048	13,593
Totals, cattle	1,290,000	1,288,100	1,137,000	1,223,600	71,526	53,333	34,218	26,737
Sheep	520,000	530,000	789,000	833,700	4,828	3,268	3,156	2,234
Swine	770,233	636,400	1,062,908	1,118,000	11,211	8,910	5,315	3,667
Totals	-	-	-	-	**123,133**	**94,065**	**66,113**	**52,966**
British Columbia—								
Horses	53,772	53,800	56,379	57,700	4,140	3,874	3,383	3,116
Milch cows	111,904	117,600	76,000	115,200	9,400	9,055	4,940	5,875
Other cattle	291,769	273,400	170,000	141,800	15,172	11,483	5,610	3,829
Totals, cattle	403,673	391,000	246,000	257,000	24,572	20,538	10,550	9,704
Sheep	204,352	197,600	145,000	151,900	2,452	1,778	1,015	760
Swine	63,136	64,700	51,977	51,700	1,200	1,165	572	414
Totals	-	-	-	-	**32,364**	**27,355**	**15,520**	**13,994**

16.—Average Values per head of Farm Live Stock in Canada, as Estimated by Crop Correspondents, 1921-32.

Province and Item.	1921.	1922.	1923.	1924	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$	$	$	$	$	$	$
Canada—												
Horses	83	72	63	64	69	72	76	76	70	61	50	46
Milch cows	51	48	47	46	51	52	61	72	74	59	43	32
Other cattle	28	26	26	27	31	31	39	46	47	35	25	17
Totals, cattle	37	35	34	34	39	41	48	57	58	45	32	24
Sheep	6	8	8	9	10	10	10	10	10	7	5	3·32
Swine	14	15	12	12	16	16	14	15	16	15	7	4·73
Prince Edward Island												
Horses	84	92	80	85	84	91	91	101	96	92	74	56
Milch cows	38	48	43	42	50	50	51	62	61	53	35	30
Other cattle	21	26	22	24	28	28	32	35	37	32	22	15
Totals, cattle	28	34	30	33	39	39	41	49	48	41	28	22
Sheep	5	7	6	8	9	9	9	10	9	7	4	3·15
Swine	16	19	11	15	20	15	15	16	16	16	7	5·19
Nova Scotia—												
Horses	98	95	96	93	94	93	107	111	102	98	86	80
Milch cows	44	45	44	43	46	48	51	61	59	52	42	34
Other cattle	27	26	28	28	30	27	29	37	38	32	25	20
Totals, cattle	34	35	35	35	37	37	40	49	48	42	33	27
Sheep	4	6	6	7	7	7	7	8	7	6	5	3·69
Swine	18	18	16	15	14	18	18	17	19	17	10	8·13
New Brunswick—												
Horses	115	110	99	104	101	109	116	120	114	101	96	80
Milch cows	40	40	43	36	46	46	46	54	58	49	38	33
Other cattle	23	25	26	22	30	26	27	30	32	30	22	17
Totals, cattle	31	32	34	29	38	37	37	43	45	39	30	25
Sheep	5	6	6	6	7	8	7	8	8	6	4	3·57
Swine	17	17	16	16	19	22	20	22	21	18	10	8·82
Quebec—												
Horses	89	100	97	98	98	101	106	108	106	95	87	90
Milch cows	46	45	42	43	51	49	54	64	70	54	38	30
Other cattle	23	23	22	23	27	26	29	34	38	30	21	13
Totals, cattle	35	35	33	34	40	39	43	51	55	42	29	21
Sheep	6	8	7	8	9	9	9	10	9	6	6	3
Swine	16	19	15	16	18	18	17	18	19	16	10	7
Ontario—												
Horses	96	90	84	80	89	95	101	99	94	81	72	63
Milch cows	59	58	58	54	60	63	74	84	85	66	48	34
Other cattle	34	34	33	35	39	39	48	54	53	39	29	20
Totals, cattle	45	44	44	43	48	51	60	68	68	51	37	27
Sheep	8	9	9	11	12	12	12	12	12	8	6	3·92
Swine	13	14	12	12	15	15	13	14	15	14	8	5·25
Manitoba—												
Horses	89	84	64	62	69	70	77	75	64	52	42	38
Milch cows	45	42	40	39	44	46	58	70	69	54	38	29
Other cattle	23	25	23	23	28	29	38	47	47	34	23	16
Totals, cattle	30	31	29	29	33	35	45	56	54	40	29	21
Sheep	6	7	7	9	10	9	9	10	10	6	4	2·82
Swine	14	14	11	11	16	16	13	15	16	14	6	4
Saskatchewan—												
Horses	82	67	53	60	66	66	66	65	56	50	36	34
Milch cows	49	40	39	41	41	41	51	65	65	58	39	29
Other cattle	28	23	21	23	26	27	37	46	45	32	22	16
Totals, cattle	33	28	26	28	31	32	42	53	52	41	29	20
Sheep	6	7	6	9	9	9	9	10	9	6	4	3
Swine	14	13	10	11	16	17	13	14	16	16	5	3·50
Alberta—												
Horses	64	42	40	38	43	45	52	51	49	41	32	28
Milch cows	48	38	39	38	40	43	55	68	74	58	42	31
Other cattle	28	21	23	23	26	28	38	48	49	35	24	17
Totals, cattle	32	25	27	27	30	33	43	53	55	41	31	22
Sheep	6	7	8	10	10	10	10	10	9	6	4	2·68
Swine	13	12	10	12	15	15	13	13	15	14	5	3·28
British Columbia—												
Horses	100	78	75	71	75	78	78	76	77	72	60	54
Milch cows	85	69	70	65	66	68	75	84	84	77	65	51
Other cattle	40	33	27	33	36	35	43	51	52	42	33	27
Totals, cattle	50	41	39	42	44	43	51	60	61	53	48	38
Sheep	8	9	10	11	13	12	12	12	12	9	7	5
Swine	17	16	14	14	17	19	19	19	19	18	11	8

17.—Estimated Numbers and Values of Farm Poultry in Canada, 1931-32.

Province and Item.	No.	Average Value per head.	Total Value.
		$	$
Canada—			
Hens and chickens 1931	61,572,000	0·60	36,908,000
1932	59,842,800	0·50	29,838,000
Turkeys 1931	2,232,000	1·88	4,198,000
1932	2,478,300	1·12	2,785,000
Geese 1931	904,000	1·53	1,385,000
1932	948,400	1·04	991,000
Ducks 1931	760,000	0·85	647,000
1932	810,700	0·65	524,000
Totals, poultry 1931	65,468,000	–	43,138,000
1932	64,080,200	–	34,138,000
P. E. Island—			
Hens and chickens 1931	827,000	0·85	703,000
1932	833,800	0·56	467,000
Turkeys 1931	10,000	2·50	25,000
1932	11,100	1·74	19,000
Geese 1931	30,000	1·81	54,000
1932	26,500	1·22	32,000
Ducks 1931	11,000	1·05	12,000
1932	13,800	0·71	10,000
Totals, poultry 1931	878,000	–	794,000
1932	885,200	–	528,000
Nova Scotia—			
Hens and chickens 1931	1,232,000	0·79	973,000
1932	1,207,600	0·64	773,000
Turkeys 1931	12,000	2·69	32,000
1932	9,400	1·92	18,000
Geese 1931	14,000	2·04	29,000
1932	12,800	1·51	19,000
Ducks 1931	9,000	1·08	10,000
1932	9,700	0·84	8,000
Totals, poultry 1931	1,267,000	–	1,044,000
1932	1,239,500	–	818,000
New Brunswick—			
Hens and chickens 1931	1,264,000	0·79	999,000
1932	1,415,000	0·66	934,000
Turkeys 1931	35,000	2·68	94,000
1932	26,800	2·07	55,000
Geese 1931	15,000	2·08	31,000
1932	14,700	1·53	22,000
Ducks 1931	10,000	1·18	12,000
1932	13,600	0·87	12,000
Totals, poultry 1931	1,324,000	–	1,136,000
1932	1,470,100	–	1,023,000
Quebec—			
Hens and chickens 1931	7,624,000	0·80	6,099,000
1932	8,113,800	0·68	5,517,000
Turkeys 1931	150,000	2·40	360,000
1932	162,500	1·76	286,000
Geese 1931	74,000	1·60	118,000
1932	78,700	1·27	100,000
Ducks 1931	84,000	0·95	80,000
1932	90,100	0·86	77,000
Totals, poultry 1931	7,932,000	–	6,657,000
1932	8,445,100	–	5,980,000
Ontario—			
Hens and chickens 1931	22,380,000	0·60	13,428,000
1932	21,683,000	0·57	12,359,000
Turkeys 1931	399,000	2·55	1,017,000
1932	414,000	1·70	704,000
Geese 1931	453,000	1·71	775,000
1932	465,000	1·22	567,000
Ducks 1931	356,000	0·93	331,000
1932	367,000	0·71	261,000
Totals, poultry 1931	23,588,000	–	15,551,000
1932	22,929,000	–	13,891,000
Manitoba—			
Hens and chickens 1931	5,003,000	0·56	2,802,000
1932	4,928,700	0·39	1,922,000
Turkeys 1931	399,000	1·79	714,000
1932	500,400	0·99	495,000
Geese 1931	88,000	1·18	104,000
1932	118,600	0·73	87,000
Ducks 1931	57,000	0·68	39,000
1932	69,000	0·46	32,000
Totals, poultry 1931	5,547,000	–	3,659,000
1932	5,616,700	–	2,536,000
Saskatchewan—			
Hens and chickens 1931	10,651,000	0·44	4,686,000
1932	10,644,000	0·32	3,406,000
Turkeys 1931	623,000	1·52	947,000
1932	729,400	0·87	635,000
Geese 1931	125,000	1·10	138,000
1932	128,200	0·67	86,000
Ducks 1931	108,000	0·61	66,000
1932	101,600	0·41	42,000
Totals, poultry 1931	11,507,000	–	5,837,000
1932	11,603,200	–	4,169,000
Alberta—			
Hens and chickens 1931	8,269,000	0·46	3,804,000
1932	7,676,100	0·32	2,456,000
Turkeys 1931	565,000	1·60	904,000
1932	582,900	0·84	490,000
Geese 1931	96,000	1·22	117,000
1932	94,300	0·68	64,000
Ducks 1931	86,000	0·65	56,000
1932	100,900	0·42	42,000
Totals, poultry 1931	9,016,000	–	4,881,000
1932	8,454,200	–	3,052,000
British Columbia—			
Hens and chickens 1931	4,322,000	0·79	3,414,000
1932	3,340,800	0·60	2,004,000
Turkeys 1931	39,000	2·70	105,000
1932	41,800	1·99	83,000
Geese 1931	9,000	2·06	19,000
1932	9,600	1·50	14,000
Ducks 1931	39,000	1·06	41,000
1932	45,000	0·89	40,000
Totals, poultry 1931	4,409,000	–	3,579,000
1932	3,437,200	–	2,141,000

Production and Value of Wool.—The production of wool in Canada is placed at 20,518,000 lb. from 3,647,207 sheep and lambs in 1932, as compared with 20,365,000 lb. from 3,608,000 sheep and lambs in 1931. Table 18 gives the total estimated production and value of wool for the years 1915 to 1932.

18.—Estimated Quantities and Values of Canadian Wool Clip, 1915-32.

Note.—Sheep on Indian reserves included.

Year.	Sheep.	Production of Wool.	Average Price per lb. of Wool.	Value.
	No.	lb.	cents.	$
1915	2,038,662	12,000,000	28	3,360,000
1916	2,022,941	12,000,000	37	4,440,000
1917	2,369,358	12,000,000	59	7,000,000
1918	3,052,748	20,000,000	62	12,000,000
1919	3,421,958	20,000,000	60	12,000,000
1920	3,720,783	24,000,000	22	5,280,000
1921	3,675,860	21,251,000	14	2,975,000
1922	3,262,626	18,523,392	17·5	3,149,000
1923	2,755,273	15,539,416	20	3,160,000
1924	2,686,367	15,111,719	25	3,774,000
1925	2,757,199	15,553,045	25	3,961,000
1926	3,144,343	17,959,896	23	4,131,000
1927	3,265,727	18,672,766	22	4,108,000
1928	3,418,992	19,611,430	26	5,099,000
1929	3,638,972	20,283,000	22	4,470,000
1930	3,698,800	21,016,000	11	2,311,000
1931	3,608,000	20,365,000	8	1,644,000
1932	3,647,207	20,518,000	5	1,093,800

Egg Production.—Table 19 gives the results of calculations indicating approximately the numbers and values of eggs produced on farms in Canada for the years 1923-32. The estimates relate only to hens' eggs produced on farms, and therefore do not include eggs of urban poultry, or eggs of farm turkeys, ducks, etc. In 1930 the production of eggs elsewhere than on farms amounted to 20,450,000 dozen, or 9·3 p.c. of the total production of eggs in that year, as ascertained at the census.

19.—Annual Production and Value of Farm Eggs in Canada, 1923-32.[1]

Note.—Includes Indian reserves.

Year.	Egg-producing Hens on Farms.	Average Production per Hen.	Total Eggs Produced.	Average Value per dozen.	Total Value of Eggs Produced.
	No.	No.	dozen.	cents.	$
1923	31,064,992	78	202,186,508	24	48,770,780
1924	32,220,057	79	212,648,685	24	50,332,439
1925	32,837,040	82	224,778,867	26	57,950,340
1926	34,006,290	84	237,080,399	28	66,198,285
1927	34,722,700	87	253,277,227	32	80,110,010
1928	34,022,511	95	268,868,857	31	84,442,727
1929	34,453,000	95	274,317,872	30	83,171,346
1930	35,044,870	95	278,255,753	27	74,837,092
1931	30,940,616	112	286,882,447	17	49,206,845
1932	30,062,697	111	277,604,215	13	36,586,415

[1] For details of egg production in 1931 and 1932, see Monthly Bulletin of Agricultural Statistics, April, 1933.

Subsection 4.—Fur Farming.[1]

Origin of Fur-Farming Industry.—A short account of the origin of the fur-farming industry in Canada was given on p. 249 of the 1929 edition of the Year Book. A fuller description of the rise of the industry in Prince Edward Island, its original home, was given in the Census and Statistics Monthly for May, 1914, at p. 110, while a still more detailed account of the earlier history of the industry was given in a publication of the Commission of Conservation, Ottawa, entitled "Fur Farming in Canada", by J. Walter Jones, B.A., B.S.A., the second edition of which was published in 1914.

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[1] Revised by Miss F. A. Brown, Chief, Fur Statistics Branch, Dominion Bureau of Statistics. A list of publications of this Branch will be found in Chapter XXIX. For further particulars regarding fur farming the reader is referred to the Report on Fur Farms, 1931, which may be obtained from the Dominion Statistician, Ottawa.

Fur Farms of Canada.—The term "fur farm" includes farms devoted entirely to the raising of fur-bearing animals (principally silver foxes), together with parts of farms where the raising of fur-bearing animals is carried on as a distinct branch of the operations. Such farms increased in numbers from 429 in 1919 to 6,369 in 1931, or, if muskrat and beaver farms are included, to 6,541, and the industry is still growing in number of farms and varieties of fur-bearing animals on these farms, although its revenue has suffered from the effects of the low level to which prices for live animals and pelts of all kinds dropped in 1931. Although the fox has proved the most suited to domestication, other kinds of fur-bearing wild animals are being raised in captivity—mink, raccoon, skunk, marten, fisher and rabbit. Mink farms are now the most numerous of the miscellaneous class, raccoon farms coming second and muskrat third. A few of the fox farms also raise miscellaneous fur-bearing animals in addition to the foxes.

Capital Investment.—The earliest Dominion-wide statistics of fur farms were collected for the year 1919, and since then annual statistics have been obtained. Statistics showing the increasing numbers and values of fur-bearing animals on fur farms are given in Tables **20** and **21**, the former showing an increase of 524 p.c. since 1923, and the latter an increase of 34 p.c. from $6,325,718 to $8,497,237. The capital investment in lands and buildings in 1931 was $7,095,111, making a grand total investment of $15,592,348 in the industry in that year.

20.—Numbers of Fur-bearing Animals on Fur Farms in Canada at Dec. 31, 1923-31.

Kind of Animal.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
Silver fox	25,186	31,204	42,125	47,657	57,961	72,631	97,190	105,894	95,734
Patch or cross fox	1,556	1,596	1,736	1,742	1,747	1,853	2,563	3,335	3,369
Red fox	627	720	1,196	1,163	1,198	1,489	2,348	3,018	2,879
Blue fox	12	216	735	1,050	1,713	1,331	1,576	1,755	1,219
Silver-blue fox	–	–	–	–	–	6	–	–	12
White fox	2	3	–	–	–	1	4	64	65
Mink	489	663	982	1,650	2,615	5,028	10,436	20,726	21,062
Raccoon	159	245	445	689	1,238	1,852	2,870	3,395	3,600
Skunk	92	133	129	88	111	99	78	20	54
Marten	11	13	35	69	112	152	187	228	272
Fisher	8	9	15	46	87	136	184	195	244
Opossum	–	–	–	–	–	–	–	3	–
Coyote	9	22	59	4	29	30	73	135	72
Badger	–	–	3	–	–	113	726	559	307
Lynx	2	4	3	3	2	9	10	13	16
Otter	–	–	–	–	–	1	2	–	–
Fitch	–	–	–	–	–	–	25	150	826
Ferret	–	–	–	–	–	–	5	1	–
Weasel	–	–	–	–	–	–	11	6	11
Nutria	–	–	–	–	–	–	–	10	27
Siberian hare	24	25	35	39	16	–	–	–	–
Chinchilla rabbit	222	351	1,215	1,843	3,085	3,464	1,438	1,206	239
Rabbit, n.e.s.	–	353	967	252	1,129	1,733	428	475	207
Karakul sheep	883	1,545	1,209	177	1,082	94	96	193	140
Muskrat[2]	10,820	[1]	28,105	35,838	55,390	168,861	711,111	425,525	119,285
Beaver[2]	23	[1]	155	360	505	799	698	1,112	806
Totals	**40,125**	**37,102**	**79,149**	**92,670**	**128,020**	**259,682**	**832,059**	**568,018**	**259,446**

[1] Statistics not available.
[2] Based on estimates furnished by the operators of the farms.

21.—Values of Fur-bearing Animals on Fur Farms in Canada, at Dec. 31, 1923-31.

Kind of Animal.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$	$	$	$	$
Silver fox....	6,119,651	8,095,181	9,536,097	10,652,304	12,824,787	14,922,378	18,047,124	13,386,171	7,259,148
Patch or cross fox...	108,324	114,524	111,293	110,517	122,400	167,222	233,220	270,257	150,597
Red fox......	10,875	14,609	23,305	21,709	28,460	46,770	91,575	77,872	45,988
Blue fox......	1,600	39,166	126,205	149,990	221,780	172,682	196,750	174,193	73,237
Silver-blue fox.........	–	–	–	–	–	1,520	–	–	650
White fox....	100	150	–	–	–	150	400	1,700	2,410
Mink........	10,679	20,042	37,161	79,145	148,005	328,998	765,333	1,286,737	642,045
Raccoon.....	2,208	2,758	6,487	16,448	41,093	59,672	80,801	72,242	48,640
Skunk.......	784	857	877	778	1,100	693	341	73	187
Marten......	950	1,200	2,805	4,870	10,510	14,310	17,340	20,660	17,550
Fisher.......	770	1,240	2,035	6,600	12,610	24,325	28,585	29,810	29,170
Opossum.....	–	–	–	–	–	–	–	25	–
Coyote......	111	650	715	55	490	480	850	1,592	836
Badger......	–	–	60	–	–	4,445	23,350	18,812	7,125
Lynx........	50	140	150	150	100	880	825	1,600	660
Otter........	–	–	–	–	–	70	100	–	–
Fitch........	–	–	–	–	–	–	550	5,760	13,478
Ferret.......	–	–	–	–	–	–	25	5	–
Weasel.......	–	–	–	–	–	–	50	25	28
Nutria.......	–	–	–	–	–	–	–	700	1,880
Siberian hare	100	100	220	188	80	–	–	–	–
Chinchilla rabbit.....	2,230	3,705	12,865	15,303	23,648	27,711	8,627	2,089	342
Rabbit,n.e.s.	–	2,065	5,334	1,944	9,280	12,575	2,428	1,623	685
Karakul sheep......	49,800	93,000	32,410	8,809	21,539	5,348	4,300	5,334	1,650
Muskrat[2].....	16,861	[1]	140,525	73,308	127,921	562,749	1,725,391	755,800	152,889
Beaver[2]......	625	–	4,650	11,720	24,455	48,475	75,070	84,667	48,042
Totals.....	**6,325,718**	**8,389,387**	**10,043,194**	**11,153,838**	**13,618,258**	**16,401,453**	**21,303,035**	**16,197,747**	**8,497,237**

[1] Statistics not available. [2] Based on estimates furnished by the operators of the farms.

Annual Revenue.—The annual revenue of the fur farmer arises from two sources, the sale of animals and the sale of pelts. Table **22** shows the sales of animals by kinds in the years 1923 to 1931 and Table **23** the sales of pelts. During the past two years the sales of pelts have exceeded the sales of live animals, while in former years the reverse was the case.

22.—Values of Fur-bearing Animals Sold from Fur Farms in Canada, 1923-31.

Kind of Animal.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$	$	$	$	$
Silver fox.........	1,286,375	2,484,166	2,755,668	2,189,330	2,501,816	3,552,874	3,856,158	1,405,202	358,394
Patch or cross fox.	14,469	27,423	28,687	19,803	23,350	38,675	66,554	29,296	8,526
Red fox..........	1,289	3,116	2,828	2,663	5,079	12,159	22,178	10,900	5,788
Blue fox..........	–	19,100	65,620	20,225	28,115	28,530	45,035	24,895	8,270
Silver-blue fox....	–	–	–	–	–	550	–	–	–
White fox.........	–	100	–	–	–	–	–	161	–
Mink............	4,081	8,353	15,654	25,692	58,992	140,889	407,570	301,754	85,728
Raccoon..........	489	867	3,683	4,955	7,626	18,031	17,996	13,800	4,825
Skunk...........	10	150	242	188	190	–	80	–	–
Marten..........	–	–	400	230	700	350	1,270	2,075	905
Fisher..........	–	100	500	825	635	2,375	4,825	4,399	7,495
Coyote..........	–	–	26	–	6	–	20	20	124
Badger..........	–	–	–	–	–	215	4,984	2,957	485
Fitch............	–	–	–	–	–	–	100	1,720	6,724
Ferret...........	–	–	–	–	–	–	75	–	–
Nutria...........	–	–	–	–	–	–	–	–	175
Siberian hare.....	–	120	252	173	58	–	–	–	–
Chinchilla rabbit.	1,600	4,540	16,384	14,412	11,860	18,355	2,469	170	58
Rabbit, n.e.s......	–	1,595	2,574	133	2,689	7,861	1,071	677	172
Karakul sheep....	6,180	3,800	4,752	16,000	4,215	150	200	1,500	70
Muskrat..........	190	–	2,024	3,773	6,719	16,206	44,308	28,394	3,881
Beaver..........	–	–	–	–	100	200	60	625	380
Totals........	**1,314,683**	**2,553,430**	**2,899,294**	**2,298,402**	**2,652,150**	**3,837,420**	**4,474,953**	**1,828,545**	**492,000**

23.—Values of Pelts Sold from Fur Farms in Canada, 1923-31.

Kind of Animal.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$	$	$	$	$
Silver fox	819,429	620,810	736,289	1,174,700	2,067,170	2,278,611	2,195,253	2,921,885	2,835,470
Patch or cross fox	32,007	33,120	27,880	34,177	49,125	54,307	43,122	75,676	84,993
Red fox	5,849	8,817	14,585	13,055	21,257	21,774	18,585	21,549	20,445
Blue fox	–	–	–	60	8,053	13,516	19,144	25,318	12,758
White fox	480	–	40	–	–	–	–	25	792
Mink	773	329	1,888	2,044	4,546	8,916	12,471	34,538	99,033
Raccoon	165	97	242	295	1,193	1,502	3,027	2,618	4,445
Skunk	9	71	65	252	30	23	48	11	4
Marten	–	–	–	–	173	30	–	100	79
Fisher	–	–	72	85	60	112	320	405	145
Coyote	301	–	30	60	60	–	340	691	718
Badger	–	–	–	–	–	28	1,646	3,925	3,101
Lynx	–	–	–	–	–	45	–	100	–
Fitch	–	–	–	–	–	–	–	–	341
Weasel	–	–	–	–	–	–	–	7	–
Siberian hare	–	200	97	7	–	–	–	–	–
Chinchilla rabbit	15	85	–	178	1,701	526	806	45	65
Rabbit, n.e.s.	–	91	195	28	182	246	263	22	–
Karakul sheep	1,145	1,000	–	–	800	–	–	–	–
Muskrat	295	–	1,930	896	8,564	9,365	9,335	9,205	8,945
Beaver	–	–	–	215	100	25	550	150	126
Totals	**860,468**	**664,620**	**783,313**	**1,226,052**	**2,163,014**	**2,389,026**	**2,304,910**	**3,096,270**	**3,071,460**

The Provincial Distribution of Fur Farming.—The statistics of Table **24**, showing the capital investment in the industry by provinces, indicate that Prince Edward Island no longer holds its earlier margin of supremacy in the industry.

In value of fur-bearing animals Ontario ranks in first place with 22·1 p.c. of the total, Quebec is next with 21·6 p.c. and Prince Edward Island, Alberta, New Brunswick, Manitoba and Saskatchewan follow with 12·2 p.c., 10·9 p.c., 7·7 p.c., 7·4 p.c. and 6·8 p.c., respectively. As regards value of land and buildings, Ontario takes first place followed by Quebec and Prince Edward Island.

24.—Numbers of Fur Farms, Values of Land and Buildings and Values of Fur-bearing Animals, by Provinces, 1929-31.

Province.	Fur Farms.			Values of Land and Buildings.			Values of Fur-bearing Animals.		
	1929.	1930.	1931.	1929.	1930.	1931.	1929.	1930.	1931.
	No.	No.	No.	$	$	$	$	$	$
P.E. Island	727	719	648	1,440,217	1,336,011	983,609	3,776,950	2,238,523	1,038,242
Nova Scotia	456	566	621	290.508	333,442	269,587	1,007,075	880,515	434,915
New Brunswick	739	789	753	603,742	656,120	451,417	2,177,905	1,498,240	657,774
Quebec	1,587	1,996	2,043	1,597,628	1,698,954	1,314,061	5,120,493	3,686,377	1,839,816
Ontario	1,055	1,203	1,218	1,893,933	1,841,226	1,687,221	3,770,441	3,378,708	1,874,217
Manitoba	223	308	311	1,125,935	524,572	508,585	1,913,271	991,688	625,632
Saskatchewan	129	213	204	671,304	738,744	723,311	814,412	1,006,906	578,207
Alberta	251	304	319	618,116	653,712	663,098	1,392,448	1,369,120	923,619
British Columbia	379	409	412	768,791	763,615	470,922	1,247,065	1,051,565	509,975
Yukon	17	15	11	42,825	33,250	23,300	82,975	50,520	14,570
N.W. Territories	–	2	1	–	3,700	–	–	585	270
Totals	**5,513**	**6,524**	**6,541**	**9,052,999**	**8,583,346**	**7,095,111**	**21,303,035**	**16,197,747**	**8,497,237**

Subsection 5.—Dairying Statistics.[1]

This subsection deals with the dairy industry under the following divisions: creamery butter; factory cheese; condensed milk and milk powder; total production of dairy factories; the production of butter and cheese on farms; and closes with a summary of the total value of dairy production in the years 1925-31.

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[1] For fuller particulars see the Bureau's Report on Dairy Factories, obtainable from the Dominion Statistician.

Creamery Butter.—Butter reached its maximum exportation in the year ended June 30, 1903, with 34,128,944 lb. The latest figures, for the year ended Dec. 31, 1932, show an export of 3,505,700 lb. The quantity of creamery butter made in Canada in 1931 was 225,955,246 lb. (Table **25**), valued at $50,198,878, an increase in quantity over the preceding year of 40,204,185 lb. or 21·6 p.c. but a decrease in value of $6,471,626 or 11·4 p.c. The average price per lb. for the whole of Canada was 22·2 cents in 1931 compared with 30·5 cents in 1930.

25.—Quantities and Values of Creamery Butter Production, by Provinces, 1929-31.

Province.	Quantities.			Values.		
	1929.	1930.	1931.	1929.	1930.	1931.
	lb.	lb.	lb.	$	$	$
Prince Edward Island	1,883,292	1,746,099	2,058,030	745,069	567,825	489,189
Nova Scotia	4,289,930	4,733,579	5,867,920	1,777,183	1,574,254	1,510,560
New Brunswick	1,860,173	2,059,675	2,438,677	747,024	669,209	614,463
Quebec	53,489,879	60,746,665	69,653,540	20,366,452	17,851,545	14,970,698
Ontario	59,346,844	64,898,291	77,502,427	23,682,187	20,593,397	18,023,230
Manitoba	15,472,109	15,786,896	21,078,073	5,724,640	4,666,746	4,370,195
Saskatchewan	14,786,205	13,920,561	18,960,352	5,541,464	4,307,967	4,025,100
Alberta	16,004,463	17,716,744	22,957,922	5,825,248	4,968,227	4,711,231
British Columbia	3,677,335	4,142,551	5,438,305	1,520,515	1,471,334	1,484,212
Totals	**170,810,230**	**185,751,061**	**225,955,246**	**65,929,782**	**56,670,504**	**59,198,878**

Factory Cheese.—In 1868 the quantity of cheese exported from Canada was 6,141,570 lb. In 1904 cheese reached its maximum exportation with 233,980,716 lb., and the exports of cheese for the year ended Dec. 31, 1932, amounted to 86,939,900 lb. The production of factory cheese in 1931 totalled 113,956,639 lb. with a value of $12,824,695, a decrease in quantity from the previous year of 4·3 p.c. and a decrease in value of 29·1 p.c. (Table **26**). The average prices per lb. were 11·2 cents in 1931 and 15 cents in 1930.

26.—Quantities and Values of Factory Cheese Production, by Provinces, 1929-31.

Province.	Quantities.			Values.		
	1929.	1930.	1931.	1929.	1930.	1931.
	lb.	lb.	lb.	$	$	$
Prince Edward Island	1,391,603	870,580	514,618	243,452	129,433	59,103
Nova Scotia	18,867	–	–	3,794	–	–
New Brunswick	578,493	606,956	528,002	109,218	98,422	62,355
Quebec	35,169,815	34,059,680	25,907,691	6,239,139	5,106,866	2,905,855
Ontario	79,904,131	81,322,611	84,440,199	14,529,309	12,372,397	9,471,427
Manitoba	500,426	504,490	454,351	106,351	86,614	61,324
Saskatchewan	142,024	140,701	320,305	30,091	23,383	39,200
Alberta	1,001,475	1,035,352	1,040,588	198,047	175,392	118,390
British Columbia	39,452	564,833	750,885	11,929	97,363	107,041
Totals	**118,746,286**	**119,105,203**	**113,956,639**	**21,471,330**	**18,089,870**	**12,824,695**

Condensed Milk and Milk Powder.—The quantity of condensed milk made in Canada in 1931 was 15,485,643 lb., valued at $1,562,710, a decrease in quantity of 7,874,812 lb. or 33·7 p.c., as compared with 1930. The quantity of evaporated milk made was 45,953,727 lb., valued at $3,523,584, a decrease of 20·3 p.c. in quantity and of 29·5 p.c. in value compared with 1930. The quantity of milk powder and skim-milk powder made in 1931 was 15,391,049 lb., valued at $1,566,356. Of the

26 condenseries in operation in Canada in 1931, 23 were situated in Ontario. The total value of products of condenseries in Canada was $8,754,002. Table 27 shows the quantities and values of products other than butter and factory cheese for the years 1929-31.

27.—Quantities and Values of Miscellaneous Products of Dairy Factories, 1929-31.

Product.	Quantities.			Values.		
	1929.	1930.	1931.	1929.	1930.	1931.
	lb.	lb.	lb.	$	$	$
Condensed milk	25,482,419	23,360,455	15,485,643	2,710,090	2,444,033	1,562,710
Evaporated milk	53,995,117	57,630,875	45,953,727	5,060,229	4,997,590	3,523,584
Milk powder	2,167,333	2,354,222	2,412,621	533,904	481,071	477,215
Skim-milk powder	12,787,818	14,307,056	12,978,428	1,242,837	1,278,250	1,089,141
Cream powder	115,614	90,134	36,903	59,281	45,067	18,648
Skim condensed milk	10,491,869	9,141,840	4,403,253	576,942	469,010	233,304
Condensed coffee	247,833	200,394	169,707	43,768	30,800	23,200
Whey butter	1,309,337	1,397,513	1,384,348	456,431	379,345	257,837
Casein	1,211,451	1,095,960	776,656	174,641	112,326	60,549
Ice cream	7,149,947	7,078,039	6,100,148	9,737,020	9,600,688	8,204,443
Milk sold	46,979,921	44,956,336	42,209,472	20,894,287	20,332,269	17,119,994
Cream sold..(lb. butter fat)	16,916,547	16,767,448	13,587,286	11,002,653	10,225,844	7,564,141
Whey cream sold	–	–	–	253,224	191,201	125,045
Buttermilk sold	–	–	–	389,008	397,800	333,403
Sundry	–	–	–	854,570	877,864	865,613
Totals	–	–	–	**53,988,885**	**51,863,158**	**41,458,827**

Total Production of Dairy Factories.—In Table 28 are shown the total values of all products of dairy factories by provinces for the five years 1927 to 1931. For Canada as a whole, the figures show a decline in the latest year of 17·5 p.c. All of the provinces show decreases for 1931 as compared with 1930.

28.—Total Values of All Products of Dairy Factories, by Provinces, 1927-31.[1]

Province.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Canada	**135,910,930**	**144,373,614**	**141,389,997**	**126,623,532**	**104,482,400**
Prince Edward Island	1,143,554	1,247,128	1,096,630	845,417	678,757
Nova Scotia	3,186,845	3,234,025	3,327,593	3,233,240	3,019,694
New Brunswick	1,683,065	1,859,635	1,926,278	1,811,623	1,538,955
Quebec	29,101,969	31,784,255	29,172,614	25,469,594	20,079,921
Ontario	73,788,538	77,699,052	73,976,945	66,430,326	53,396,641
Manitoba	8,385,844	8,749,518	9,953,940	8,519,020	7,880,745
Saskatchewan	6,414,373	6,966,282	8,471,388	7,083,895	6,573,427
Alberta	6,888,049	6,810,805	7,315,386	6,343,576	5,851,255
British Columbia	5,318,693	6,022,914	6,149,223	6,886,841	5,463,005

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[1] The total values of dairy products in 1871 and various subsequent years are shown in the "Statistical Summary of the Progress of Canada", immediately following the Table of Contents.

Dairy Butter and Home-made Cheese.—The statistics of the foregoing tables relate entirely to the products of dairy factories. In addition, there is a large production of butter on farms, generally described as dairy butter, and a small production of home-made cheese. No annual statistics are collected of these products; the census of 1911, however, showed that the production of dairy butter in 1910 was 137,110,200 lb., value $30,269,497, and of home-made cheese 1,371,092 lb., value $154,088. According to preliminary figures of the census of 1931 the production of dairy butter in 1930 was 97,214,696 lb. The production of dairy butter in 1931 is estimated at approximately 104,640,000 lb., with a value of $21,723,000, thus making the total estimated production of butter, including dairy butter, in 1931, 330,595,246 lb., valued at $71,921,878.

Total Values of Dairy Products.—The total value of the dairy products of Canada in 1931 is estimated at $161,243,580, comprising: creamery butter $50,198,878; dairy butter $21,723,000, factory cheese $12,824,695, home-made cheese $108,500, miscellaneous dairy factory products $17,082,507 and milk consumed fresh or whole $59,306,000. Details by provinces are given for 1931 in Table **29**, with Dominion totals for the six preceding years.

29.—Values of the Dairy Production by Provinces, 1931, with Dominion Totals for 1925-31.

Province.	Dairy Butter.	Creamery Butter.	Home-made Cheese.	Factory Cheese.	Miscellaneous Factory Products.	Milk Consumed Fresh or Otherwise used.	All Products.
	$	$	$	$	$	$	$
Prince Edward Island	468,000	489,189	50	59,103	58,370	858,000	1,932,712
Nova Scotia	1,263,000	1,510,560	5,250	–	1,006,155	3,149,000	6,933,965
New Brunswick	2,458,000	614,463	800	62,355	341,029	2,856,000	6,332,647
Quebec	3,312,000	14,970,698	29,000	2,905,855	2,511,183	15,433,000	39,161,736
Ontario	7,500,000	18,023,230	15,000	9,471,427	10,018,429	11,491,000	56,519,086
Manitoba	1,275,000	4,370,195	22,000	61,324	427,721	5,983,000	12,139,240
Saskatchewan	3,180,000	4,025,100	16,000	39,200	490,771	6,760,000	14,511,071
Alberta	1,785,000	4,711,231	17,000	118,390	459,991	9,481,000	16,572,612
British Columbia	482,000	1,484,212	3,400	107,041	1,768,858	3,295,000	7,140,511
Canada 1931	21,723,000	50,198,878	108,500	12,824,695	17,082,507	59,306,000	161,243,580
1930	23,844,000	56,670,504	112,040	18,089,870	21,305,045	149,823,000	269,844,459
1929	28,929,000	65,929,782	82,800	21,471,330	22,091,945	153,238,000	291,742,857
1928	29,103,000	64,702,538	82,000	30,494,463	20,581,490	152,661,856	297,625,347
1927	30,435,121	65,709,986	70,654	25,522,148	18,879,335	154,257,346	294,874,590
1926	28,252,777	61,753,390	80,240	28,807,841	17,767,271	140,643,460	277,304,979
1925	32,128,799	63,008,097	95,073	36,571,556	16,882,747	136,177,373	284,863,645

Subsection 6.—Fruit Farming.

The native fruits of Canada, with the exception of the blueberry and the cranberry, are not cultivated on a commercial scale. Among the introduced fruits, the apple holds the premier place in Canadian fruit growing, the value of the commercial production of this fruit ranging between six and twenty-one million dollars in the last ten years. An important subsidiary of the grape-growing industry is the manufacture of native wines, which has increased from an estimated value of $706,000 in 1921 to $3,276,847 in 1931.

For a fuller discussion of fruit farming in Canada the reader is referred to pp. 242-7 of the 1931 edition of the Year Book.

Census Statistics.—Statistics of the number of bearing and non-bearing fruit trees in 1921 were published on p. 252 of the 1925 edition, together with comparative figures for 1911 which were summarized on p. 244 of the 1931 edition. The figures for 1931 were not available at the time of going to press.

Annual Statistics of Fruit Production.—Table **30** shows the estimated quantities and values of commercial fruits produced in Canada in 1931 and 1932

Owing to changes in the method of collecting these statistics, in some instances they cannot be considered as strictly comparable with those published in previous editions of the Year Book. Figures for the years 1923-31 on the old basis will be found at p. 1054 of the 1932 Year Book.

30.—Estimated Quantities and Values of Commercial Fruit Production in Canada, 1931-32.

Kind of Fruit.	1931.			1932.		
	Total Quantity.	Average Price.	Total Value.	Total Quantity.	Average Price.	Total Value.
		$	$		$	$
Apples	3,793,052 brl.	2·28	8,632,014	2,789,447 brl.	1·98	5,518,519
Pears	399,821 bush.	1·16	464,773	394,268 bush.	0·86	339,135
Plums and prunes	224,621 "	1·03	234,930	211,750 "	0·89	189,425
Peaches	882,413 "	1·33	1,172,527	793,750 "	1·05	834,500
Apricots	48,732 "	2·15	104,841	41,823 "	2·85	119,196
Cherries	238,487 "	2·40	574,214	242,531 "	1·78	432,848
Strawberries	17,543,656 qts.	0·10	1,755,235	23,909,752 qts.	0·06	1,427,767
Raspberries	5,723,473 "	0·15	842,106	7,416,512 "	0·09	690,017
Grapes	51,363,240 lbs.	0·016	835,803	49,000,000 lbs.	0·014	671,300

The Tree Nursery Industry.—The first Canadian commercial nursery was established near Fonthill, Ont., and it was followed within a few years by the establishment of a nursery in Toronto by a Rochester, N.Y., firm. Since that time the industry has steadily spread as the country has developed, until to-day there are approximately 170 firms growing or dealing in nursery stock of all kinds, including fruit trees.

Table **31** shows the total numbers and values of fruit trees, bushes and plants sold by nurserymen for the four years 1929-32. For 1919 and 1920, see the Canada Year Book of 1921, p. 257; for 1921 and 1923, see the Canada Year Book of 1926, p. 241; for 1924 and 1925, see the Canada Year Book of 1929, p. 257; for 1926 and 1927, see the Canada Year Book of 1931, p. 246 and for 1928, see the Canada Year Book of 1932, p. 1055.

31.—Numbers and Values of Fruit Trees, Bushes and Plants, Sold by Nurserymen in Canada, years ended May 31, 1929-32.

Description of Tree, Bush or Plant.	Numbers Sold.				Total Values.			
	1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	$	$	$	$
Apples—								
Early	52,850	45,587	42,455	46,575	20,295	16,466	17,225	15,752
Fall	62,892	63,354	42,352	65,567	23,014	24,408	13,964	19,746
Winter	151,503	159,361	151,831	175,383	51,824	54,592	57,171	59,887
Crab apples	18,702	12,281	8,328	9,179	6,188	3,783	3,301	2,928
Totals, Apples	285,947	280,583	244,966	296,504	101,321	99,249	91,663	98,314
Pears	34,863	35,198	41,268	42,752	15,340	15,618	20,569	19,161
Plums	57,693	50,686	37,168	35,512	21,263	20,033	18,555	14,421
Peaches	88,180	53,466	72,190	80,471	22,200	14,271	17,814	17,798
Cherries	51,752	47,738	48,396	44,732	25,840	22,837	25,024	21,161
Apricots	312	556	926	608	154	276	496	182
Quinces	72	69	157	42	30	31	86	21
Blackberries	40,825	24,170	27,838	31,932	2,279	1,216	1,293	1,216
Currants	92,901	69,724	65,777	57,004	8,923	5,937	6,376	4,687
Grapes	750,083	1,047,647	483,734	208,825	47,788	75,408	39,126	13,267
Gooseberries	39,859	35,742	30,866	34,917	6,740	5,411	5,004	3,674
Raspberries	506,290	520,504	603,076	681,256	27,267	25,715	26,666	27,395
Loganberries	2,155	1,862	7,143	1,168	198	179	2,539	113
Strawberries	2,004,258	1,593,353	1,539,159	1,619,719	17,833	17,076	14,660	12,365
Totals	–	–	–	–	**297,176**	**303,257**	**269,906**	**233,775**

Floriculture.—The production and value of floricultural and decorative plants grown in Canada and sold during the year ended May 31, 1932, was $1,607,096 as indicated by Table **32.**

32.—Production and Value of Floricultural and Decorative Plants Grown in Canada and Sold during the year ended May 31, 1932.

Description.	Quantity.	Average Wholesale Price per Unit.	Total Wholesale Value.
	No.	$	$
1. Outdoor roses....	304,265	0·22	66,022
2. Ornamental trees (evergreen)..........	68,244	0·76	51,744
3. Ornamental trees (deciduous)..........	198,518	0·21	42,489
4. Shrubs for outdoor planting...	466,092	0·19	88,267
5. Perennials......	364,923	0·10	38,134
6. Biennals........	53,354	0·03	1,721
7. Bedding plants for transplanting............	2,359,942	–	82,049
8. Flowering plants for indoor use...	351,182	–	102,806
9. Decorative plants for indoor use............	67,233	–	28,943
10. Flowering bulbs.	389,204	0·03	10,994
11. Cut flowers, grown indoors..	23,493,349	–	1,079,232
12. All other varieties including the above grown outdoors........	–	–	14,695
Total Value......	–	–	**1,607,096**

Subsection 7.—Special Agricultural Crops.

Maple Syrup and Sugar.—The Canada Year Book, 1924, contained a description of the process of maple sugar-making on pages 247 and 248. Table 33 gives the production and value of maple sugar and syrup in Canada for the years 1930, 1931 and 1932 as estimated by the Dominion Bureau of Statistics.[1]

33.—Estimated Quantities and Values of Maple Sugar and Maple Syrup Produced in Canada, by Provinces, 1930-32.

Province and Year.		Maple Sugar.			Maple Syrup.			Total Value of Sugar and Syrup.
		Quantity.	Average Price per lb.	Value.	Quantity.	Average Price per Gallon.	Value.	
		lb.	cents.	$	gallons.	$	$	$
Canada.................	**1930**	**8,208,276**	**17**	**1,381,513**	**2,185,379**	**1·77**	**3,869,107**	**5,250,620**
	1931	**5,484,100**	**17**	**930,800**	**1,314,700**	**1·98**	**2,606,900**	**3,537,700**
	1932	**7,217,300**	**10**	**692,480**	**1,744,479**	**1·18**	**2,054,277**	**2,746,757**
Nova Scotia............	1930	82,894	33	27,355	3,464	2·54	8,799	36,154
	1931	63,600	29	18,400	3,100	2·28	7,000	25,400
	1932	102,260	27	27,610	9,439	2·24	21,143	48,753
New Brunswick..........	1930	66,711	32	21,348	2,725	2·08	5,668	27,016
	1931	58,500	28	16,400	2,200	2·11	4,600	21,000
	1932	58,080	21	12,197	4,036	1·89	7,628	19,825
Quebec.................	1930	7,576,204	16	1,212,193	1,538,199	1·56	2,399,590	3,611,783
	1931	4,726,000	16	756,000	737,000	1·44	1,061,300	1,817,300
	1932	6,681,000	09	585,000	1,142,000	1·00	1,142,000	1,727,000
Ontario.................	1930	482,467	25	120,617	640,991	2·27	1,455,050	1,575,667
	1931	636,000	22	140,000	572,400	2·68	1,534,000	1,674,000
	1932	375,960	18	67,673	589,004	1·50	883,506	951,179

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[1] For details, see Monthly Bulletin of Agricultural Statistics for June, 1932, p. 185.

The table shows that for the whole of Canada there were estimated increases of 1,733,200 lb. of maple sugar and 429,779 gal. of maple syrup and a decrease of $790,943 in the combined value of the two products in 1932 as compared with 1931.

Sugar Beets and Beetroot Sugar.—A brief account of the development of the beetroot sugar industry in Canada will be found in the Canada Year Book, 1925, pp. 255-256. At the present time two companies are operating in Canada: the Canada and Dominion Sugar Co., Ltd., with factories at Chatham and Wallaceburg in Ontario, and the Canadian Sugar Factories, Ltd., with a plant at Raymond, Alberta. Table **34** shows the area, yield and value of sugar beets grown in Canada in the years 1921-31.

34.—Acreages, Yields and Values of Sugar Beets in Canada and Quantities of Refined Beetroot Sugar Produced, 1921-31.

Note.—Corresponding figures for 1911-20 are given at p. 1057 of the 1932 Year Book.

Year.	Acres Grown.	Yield per acre.	Total Yield.	Average Price per ton.	Total Value.	Quantity and Value of Refined Beetroot Sugar Produced.		
	acres.	tons.	tons.	$	$	lb.	$	cents per lb.
1921	25.535	7·80	199,334	9·90	1,974,384	52,862,377	3,554,203	6·72
1922	14.955	8·55	127,807	7·56	966,521	29,911,770	1,645,885	5·50
1923	17.941	8·87	159.200	12·08	1,922,668	39,423 160	3,745,200	9·49
1924	31,111	9·50	295.177	5·78	1,704,791	85,770,709	6,192,645	7·21
1925	34.803	10·63	370,047	7·27	2,688,302	72,819.919	5,206,624	7·14
1926	30,073	8·90	267,754	8·54	2,286,761	70,388,105	4,269,076	6·07
1927	25.961	7·96	206,713	9·73	2,012,134	60,969,131	3,694,303	6·06
1928	34.323	7·14	244,930	8·33	2,041,465	64,653.348	3,340,571	5·17
1929	32.556	7·23	235,465	8·84	2,080,996	69,399.213	3,335,344	4·81
1930	40.532	9·80	397,576	8·25	3,278,625	94,624,700	4,529,944	4·79
1931	43,337	10·06	435,992	7·32	3,190,198	107,139,129	4,794,551	4·48

The production in 1931 of the largest beet-growing countries, in thousands of short tons, was as follows: Russia, 13,411; Germany, 12,165; United States, 7,901; France, 6,828; Czechoslavakia, 5,775; Spain, 3,148; Poland, 3,043; Italy, 2,612; Great Britain and Northern Ireland, 1,860; Belgium, 1,615; Netherlands, 1,134; Austria, 1,077.

Tobacco.[1]—In 1932, the commercial tobacco crop of Canada amounted to 54,094,000 pounds, the highest production on record, from 54,138 acres, as compared with 51,300,000 pounds from 55,000 acres in 1931. The farm value of the tobacco crop in 1932 is estimated at $6,088,300 as compared with $7,177,540 in 1931.

Table **35** lists the acreages, quantities produced and average yields per acre for 1900, 1910, and 1920 to 1932. The acreages for 1911, 1921 and 1931 are also the comprehensive figures of the census. For the inter-censal years, the acreage and production statistics quoted relate to the commercial crop only. This distinction is much more necessary in Quebec than in Ontario, since a considerable part of the tobacco production of Quebec comes from small plots.

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[1] For further details, see Monthly Bulletin of Agricultural Statistics for March, 1933, pp. 62-64.

35.—Acreages and Yields of Tobacco in Canada, by Provinces, 1900, 1910, 1911 and 1920-32.

Year.	Quebec.	Ontario.	Canada.[2]	Quebec.	Ontario.	Canada.[2]	Quebec.	Ontario.	Canada.[2]
	acres.	acres.	acres.	000 lb.	000 lb.	000 lb.	lb. per acre.	lb. per acre.	lb. per acre.
1900[1]	8,661	3,144	11,906	7,565	3,504	11,267	881	1,114	946
1910[1]	11,818	7,017	18,928	10,115	7,499	17,632	856	1,068	931
1911[1]	12,134	13,591	25,826	–	–	–	–	–	–
1920[1]	17,252	19,621	36,891	13,366	19,279	32,660	775	983	883
1921[1]	9,958	6,663	16,628	–	–	–	–	–	–
1921	5,256	6,553	11,809	6,127	7,122	13,249	1,166	1,091	1,124
1922	16,573	9,189	25,762	14,916	11,032	25,948	900	1,201	1,007
1923	15,302	8,630	23,932	10,500	21,297	10,797	680	1,251	890
1924	8,044	13,273	21,317	6,576	12,135	18,711	817	914	878
1925	9,554	18,261	27,825	8,632	20,623	29,266	910	1,130	1,052
1926	9,808	23,493	33,356	8,693	20,064	28,824	886	854	864
1927	10,018	33,650	44,028	7,824	35,622	43,910	769	1,095	997
1928	10,368	32,654	43,138	8,546	33,266	41,976	824	1,019	972
1929	9,300	26,910	36,310	8,380	27,419	29,886	901	795	823
1930	8,450	32,805	41,444	8,021	28.617	36,717	901	876	886
1931[1]	7,330	47,360	55,060	6,340	44,770	51,300	865	945	932
1932	8,520	45,106	54,138	7,952	45,760	54,094	933	1,014	999

[1] Census data. [2] The totals for Canada include small amounts produced in other provinces, principally in British Columbia.

Flax Fibre.—Table 36, compiled from information furnished by the Economic Fibre Division of the Dominion Experimental Farms, shows the area, production and value of flax fibre and allied products in Canada for each of the years 1915 to 1932.

36.—Acreages, Yields and Values of Flax Fibre, etc., in Canada, 1915-32.

Year.	Area.	Production.			Values.			
		Seed.	Fibre.	Tow.	Seed.	Fibre.	Tow.	Total.
	acres.	bush.	lb.	tons.	$	$	$	$
1915	4,000	48,000	1,600,000	80	76,800	320,000	2,800	399,600
1916	5,200	25,000	600,000	75	75,000	180,000	15,000	270,000
1917	8,000	72,000	2,800,000	–	396,000	1,540,000	–	1,936,000
1918	20,000	110,000	6,200,000	900	930,769	1,085,000	270,000	2,235,769
1919	20,262	90,000	4,416,000	1,162	967,500	3,975,400	581,000	4,942,900
1920	31,300	217,000	7,440,000	1,860	434,000	5,952,000	744,000	7,130,000
1921	6,515	52,120	1,824,200	372	469,080	1,550,570	148,800	2,168,450
1922	1,200	10,800	360,000	96	21,600	72,000	11,520	105,120
1923	3,300	20,000	272,650	74¼	50,000	111,375	4,440	165,815
1924	5,760	69,120	1,785,600	18¾	172,800	535,500	3,750	712,050
1925	6,200	68,200	1,440,000	2,325	136,400	201,600	116,250	454,250
1926	4,025	48,300	–	2,075	96,600	–	111,250	207,850
1927	4,260	36,080	–	4,260	108,240	–	213,000	321,240
1928	6,880	41,280	–	6,880	165,120	–	344,000	509,120
1929	6,280	32,970	–	4,500	156,607	–	236,250	392,857
1930	6,143	62,232	–	6,086	96,684	–	273,870	370,554
1931	4,220	35,870	25,000	3,019	53,805	4,000	120,760	178,565
1932	5,135	35,945	200,000	3,552	56,156	18,000	95,964	169,960

Hives and Honey.—A table on page 277 of the 1925 Year Book shows the production and value of honey and beeswax in 1920, according to the census of 1921. The principal honey-producing provinces were Ontario and Quebec, which between them produced in 1920 more than 94 p.c. of the recorded total of 6,461,450 lb., valued at $1,633,251.

There are at present no uniform annual statistics of hives and honey for all the provinces, but a synopsis of the existing provincial estimates for recent years was given in the Monthly Bulletin of Agricultural Statistics for March, 1933, pp. 64-68. These estimates show a large increase since 1920, the total estimated honey production in 1931 being about 20,628,934 lb., the average value per lb. 8 cents and the total value $1,651,175.

Subsection 8.—Farm Labour and Wages.

Average Wages of Farm Help.—The average wages paid to farm helpers in Canada for the year 1932 again show a considerable decrease as compared with the previous year. The cost of farm labour reached its highest point in 1920. In the next two years there was a rapid drop so that the average of yearly wages including board for male help in 1922 was nearly 28 p.c. less than in 1920. From 1923 until 1929, no very wide fluctuation occurred. In 1930, 1931 and 1932 continuous marked reductions were registered in the average value of yearly wages and board, following the downward trend of the prices of farm produce.

In Table **37** the value of wages and board is given for the years 1914, 1920, 1925, 1930, 1931 and 1932, both for the summer season and for the year, distinction being made in all cases between wages and board.

37.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1925 and 1930-32.

Note.—M=Males. F=Females.

Province.	Year.	Per Month in Summer Season.						Per Year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		$	$	$	$	$	$	$	$	$	$	$	$
Canada	1914	21	8	14	11	36	19	155	57	168	132	323	189
	1920	60	27	26	20	86	47	543	275	278	217	821	492
	1925	40	22	23	19	63	41	383	244	258	218	641	462
	1930	34	20	22	18	56	38	326	210	233	199	559	409
	1931	25	15	18	15	43	30	240	159	199	163	439	322
	1932	19	11	15	12	34	23	176	120	165	135	341	255
P.E. Island	1914	15	5	10	8	25	13	101	40	120	96	221	136
	1920	42	18	18	14	60	32	371	212	201	160	572	272
	1925	31	18	16	13	47	31	293	175	176	138	469	313
	1930	32	16	18	14	50	30	308	179	205	165	513	344
	1931	25	15	14	10	39	25	250	153	163	131	413	284
	1932	18	10	12	11	30	21	164	106	141	119	305	225
Nova Scotia	1914	20	7	11	8	31	15	169	59	132	96	301	155
	1920	49	21	24	17	73	38	472	218	263	190	735	408
	1925	36	18	20	15	56	33	347	199	221	161	568	360
	1930	34	17	20	14	54	31	353	187	209	157	562	344
	1931	27	15	17	14	44	29	269	161	196	155	465	316
	1932	22	13	15	12	37	25	213	135	164	126	377	261
New Brunswick	1914	21	7	11	8	32	15	170	69	132	96	302	165
	1920	56	19	23	16	79	35	531	213	254	178	785	391
	1925	37	18	17	13	54	31	370	210	191	151	561	361
	1930	34	16	20	15	54	31	335	181	215	164	550	345
	1931	27	14	16	12	43	26	276	161	184	143	460	304
	1932	20	11	13	11	33	22	175	121	145	115	320	236

37.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1925 and 1930-32—concluded.

Note.—M=Males. F=Females.

Province.	Year.	Per Month in Summer Season.						Per Year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		$	$	$	$	$	$	$	$	$	$	$	$
Quebec	1914	21	7	13	9	34	16	140	44	156	108	296	152
	1920	62	24	24	16	86	40	524	235	243	172	767	407
	1925	37	19	19	13	56	32	340	190	196	141	536	331
	1930	33	17	19	13	52	30	316	175	194	139	510	314
	1931	26	14	15	11	41	25	244	143	162	118	406	261
	1932	18	10	12	9	30	19	158	104	126	98	284	202
Ontario	1914	19	7	13	10	32	17	141	52	156	120	297	172
	1920	52	25	23	19	75	44	474	259	262	211	736	470
	1925	34	22	20	17	54	39	326	227	222	182	548	409
	1930	31	21	20	17	51	38	304	229	228	194	532	423
	1931	25	17	18	15	43	32	237	180	203	168	440	348
	1932	18	12	15	12	33	24	178	130	163	130	341	260
Manitoba	1914	24	9	15	13	39	22	184	70	180	156	364	226
	1920	70	34	28	24	98	58	650	312	325	247	975	559
	1925	38	21	22	19	60	40	357	221	260	215	617	436
	1930	32	18	21	18	53	36	298	194	238	204	536	398
	1931	22	13	17	15	39	28	213	134	197	162	410	296
	1932	17	10	15	13	32	23	164	101	173	148	337	249
Saskatchewan	1914	24	9	17	14	41	23	162	67	204	168	366	235
	1920	72	35	30	25	102	60	667	364	336	289	1,003	653
	1925	42	22	24	21	66	43	396	257	268	234	664	491
	1930	37	21	23	19	60	40	340	215	253	212	593	427
	1931	23	13	19	16	42	29	215	138	203	174	418	312
	1932	18	10	15	13	33	23	158	98	166	142	324	240
Alberta	1914	24	10	16	14	40	24	173	68	192	168	365	236
	1920	76	36	31	26	107	62	697	360	341	278	1,038	638
	1925	44	27	24	22	68	49	421	277	280	244	701	521
	1930	37	21	23	20	60	41	342	223	256	222	598	445
	1931	25	15	19	17	44	32	232	156	215	189	447	345
	1932	20	12	16	14	36	26	185	120	182	159	367	279
British Columbia	1914	27	13	21	18	48	31	208	108	252	216	460	324
	1920	64	36	31	27	95	63	684	431	349	311	1,033	742
	1925	46	26	26	21	72	47	470	282	300	232	770	514
	1930	46	25	26	21	72	46	450	270	291	242	741	512
	1931	35	20	23	19	58	39	358	228	275	228	633	456
	1932	25	15	19	15	44	30	250	168	217	180	467	348

Subsection 9.—Prices of Agricultural Produce.

The average monthly cash prices of representative grades of Canadian wheat, oats, barley, flax and rye in the Winnipeg market—basis, in store at Fort William and Port Arthur—will be found for each month from January, 1930, to December, 1932, in Table **38**. The average yearly prices of home-grown wheat, barley and oats in England and Wales are furnished in Table **39**; in this table British currency is converted into Canadian currency at par rate of exchange (£=$4.86⅔). The average monthly prices of flour, bran and shorts at Montreal, Toronto, Winnipeg, Minneapolis and Duluth for 1932 are given in Table **40**.

The yearly average prices per cwt. of Canadian live stock at Toronto, Montreal, Winnipeg and Edmonton are given for 1931 in Table **41** and the average yearly prices in 1932 at these centres and at Calgary in Table **42.**

38.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flax and Rye—basis, in store at Fort William and Port Arthur—1930-32, and Yearly Average Prices for crop years ended July 31, 1926-32.

Year and Month.	Wheat, No. 1 N.	Oats, No. 2 C.W.	Barley, No. 3 C.W.	Flaxseed, No. 1 C.W.	Rye, No. 2 C.W.
	cts.	cts.	cts.	cts.	cts.
1930.					
January	130·1	59·5	56·8	251·9	85·4
February	117·4	59·5	50·8	250·0	72·6
March	106·3	55·6	46·6	244·0	60·5
April	109·9	53·9	48·9	243·0	66·1
May	108·0	49·9	44·9	219·3	62·0
June	103·3	47·6	39·4	211·6	53·8
July	95·1	43·9	39·1	178·9	52·4
August	92·5	40·3	39·0	162·4	55·1
September	78·1	33·1	31·6	143·5	42·5
October	72·5	32·9	28·3	129·3	37·4
November	64·4	28·3	23·4	105·3	30·6
December	55·4	26·8	25·0	97·9	30·3
1931.					
January	53·9	26·1	22·1	95·0	27·1
February	59·3	27·6	22·1	96·9	28·6
March	56·8	27·8	25·1	103·4	31·3
April	59·6	28·1	28·3	104·0	31·6
May	60·6	29·1	31·0	106·1	34·1
June	60·8	29·6	32·1	107·0	35·5
July	57·0	29·4	32·3	118·3	32·8
August	55·1	28·3	31·8	103·0	29·4
September	53·6	27·4	30·6	97·4	32·5
October	59·9	31·0	33·1	94·5	37·0
November	67·3	33·6	42·5	105·6	48·8
December	60·6	30·0	38·4	99·0	42·8
1932.					
January	60·0	29·4	37·8	98·5	43·6
February	63·2	29·5	38·4	101·5	44·1
March	63·1	30·0	39·9	101·6	47·9
April	62·6	32·4	41·0	98·5	45·8
May	62·9	35·5	40·3	83·8	41·3
June	55·1	33·9	37·8	71·8	33·8
July	54·8	35·1	36·5	68·3	33·1
August	56·3	29·9	34·5	71·6	33·3
September	51·9	26·1	28·9	78·5	31·9
October	48·3	23·5	25·8	70·9	29·3
November	46·8	24·0	30·3	69·6	29·5
December	42·4	21·0	27·8	70·1	29·8
Averages, crop year ended July, 1926	**151·2**	**49·6**	**63·9**	**213·8**	**89·8**
" " " **1927**	**146·2**	**58·8**	**72·7**	**195·0**	**99·7**
" " " **1928**	**146·3**	**65·2**	**85·3**	**189·9**	**129·9**
" " " **1929**	**124·0**	**58·8**	**71·4**	**202·2**	**100·7**
" " " **1930**	**124·2**	**58·6**	**60·0**	**247·5**	**80·2**
" " " **1931**	**64·2**	**29·9**	**28·4**	**114·1**	**34·7**
" " " **1932**	**59·8**	**31·4**	**37·3**	**93·7**	**40·0**

39.—Yearly Average Prices of Home-Grown Wheat, Barley and Oats in England and Wales, 1902-32.

Source: *London Gazette*, published pursuant to Sec. 8 of the Corn Returns Act, 1882, and the Corn Sales Act, 1921.

Note.—By the Corn Sales Act, 1921, the legal unit was changed from quarters of 8 bushels to long cwt., the change becoming compulsory on Jan. 1, 1923. The long cwt. is 112 lb.

Year.	Wheat.		Barley.		Oats.	
	per qr.	per bush.	per qr.	per bush.	per qr.	per bush.
	s. d.	$	s. d.	$	s. d.	$
1902	28 1	0·85	25 8	0·78	20 2	0·61
1903	26 9	0·81	22 8	0·69	17 2	0·52
1904	28 4	0·86	22 4	0·68	16 4	0·50
1905	29 8	0·90	24 4	0·74	17 4	0·53
1906	28 3	0·86	24 2	0·73	18 4	0·56
1907	30 7	0·93	25 1	0·76	18 10	0·57
1908	32 0	0·97	25 10	0·79	17 10	0·54
1909	36 11	0·82	26 10	0·82	18 11	0·58
1910	31 8	0·96	23 1	0·70	17 4	0·53
1911	31 8	0·96	27 3	0·83	18 10	0·57
1912	34 9	1·06	30 8	0·93	21 6	0·65
1913	31 8	0·96	27 3	0·83	19 1	0·58
1914	34 11	1·06	27 2	0·83	20 11	0·64
1915	52 10	1·61	37 4	1·13	30 2	0·92
1916	58 5	1·78	53 6	1·56	33 5	0·89
1917	75 9	2·30	64 9	1·89	49 10	1·32
1918	72 10	2·22	59 0	1·72	49 4	1·31
1919	72 11	2·22	75 9	2·21	52 5	1·39
1920	80 10	2·46	89 5	2·60	56 10	1·51
1921	71 6	2·17	52 2	1·52	34 2	0·90
1922	47 11	1·46	40 3	1·18	29 1	0·77
	per long cwt.	per bush.	per long cwt.	per bush.	per long cwt.	per bush.
1923	9 10	1·28	9 5	0·98	9 7	0·71
1924	11 6	1·50	13 1	1·36	9 9	0·72
1925	12 2	1·59	11 9	1·23	9 9	0·72
1926	12 5	1·62	10 4	1·08	9 0	0·66
1927	11 6	1·50	11 10	1·23	9 2	0·68
1928	10 2	1·32	11 1	1·15	10 5	0·69
1929	9 11	1·29	10 0	1·05	8 10	0·66
1930	8 0	1·04	8 0	0·83	6 3	0·46
1931	5 9	0·75	8 0	0·83	6 4	0·47
1932	5 11	0·77	7 8	0·80	7 1	0·52

40.—Monthly Average Prices of Flour, Bran and Shorts at Principal Markets, 1932.

Sources: For Montreal, the *Gazette;* for Toronto, dealers' quotations; for Winnipeg and U.S. cities, the *Northwestern Miller*, Minneapolis.

Note.—The ton=2,000 lb. and the barrel=196 lb.

Month.	Montreal.				Toronto.			
	Flour First Patents.	Flour, Ontario, Delivered at Montreal.	Bran.	Shorts.	First Patents Flour (Jute bags).	First Patents Flour (Cotton bags).	Bran.	Shorts.
	per brl.	per brl.	per ton.	per ton.	per brl.	per brl.	per ton.	per ton.
	$	$	$	$	$	$	$	$
January	5·07[1]	3·36	19·99	20·99	5·07[1]	5·25	19·50	20·50
February	5·05[1]	3·27	19·75	20·75	5·05[1]	5·15	19·50	20·50
March	5·07[1]	3·20	22·00	23·00	5·07[1]	5·25	21·50	22·50
April	5·04[1]	2·94	24·44	25·44	5·04[1]	5·25	24·00	25·00
May	5·09[1]	2·85	21·40	22·40	5·09[1]	5·25	21·50	22·50
June	4·84[1]	2·75	17·83	18·83	4·84[1]	4·95	18·00	19·00
July	4·74[1]	2·55	17·96	19·38	4·74[1]	4·85	17·75	19·25
August	4·86[1]	2·68	19·03	21·03	4·86[1]	5·05	18·60	20·60
September	4·68[1]	2·75	18·45	20·45	4·68[1]	4·75	18·50	20·50
October	4·52[1]	2·72	17·25	19·25	4·52[1]	4·65	16·80	18·70
November	4·48[1]	2·63	17·25	18·45	4·48[1]	4·60	15·25	16·25
December	4·40[1]	2·55	16·87	17·87	4·40[1]	4·50	16·25	17·50

[1] Carload lots—Montreal rate points, which included the Toronto district also.

40.—Monthly Average Prices of Flour, Bran and Shorts at Principal Markets, 1932—concluded.

Sources: For Montreal, the *Gazette*; for Toronto, dealers' quotations; for Winnipeg and U.S. cities, the *Northwestern Miller*, Minneapolis.

Note.—The ton=2,000 lb. and the barrel=196 lb.

Month.	Winnipeg.			Minneapolis.			Duluth.
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.
	per brl. $	per ton. $	per ton. $	per brl. $	per ton. $	per ton. $	per brl. $
January	4·39	14·00	14·60	4·64—5·16	12·10—12·60	11·50—12·10	4·61—4·76
February	4·30	14·00	15·00	4·65—5·18	11·13—11·38	10·50—11·13	4·55—4·70
March	4·34	15·25	16·25	4·34—4·91	13·13—13·63	12·25—13·00	4·31—4·52
April	4·32	18·50	19·50	4·61—5·06	13·00—13·75	12·88—13·50	4·13—4·37
May	4·35	18·00	19·00	4·55—4·94	10·75—11·00	10·75—11·00	4·08—4·38
June	4·25	16·40	17·20	4·37—4·68	9·00— 9·60	8·90— 9·60	4·48—4·63
July	4·15	15·00	16·00	4·15—4·53	8·13— 8·38	8·50— 9·06	4·15—4·31
August	4·09	15·00	16·00	4·38—4·61	8·40— 8·75	9·00— 9·35	4·14—4·31
September	3·67	15·00	16·00	4·35—4·59	8·00— 8·38	8·13— 8·63	4·13—4·28
October	3·52	13·00	14·00	4·10—4·34	7·60— 7·90	7·60— 8·00	3·84—3·99
November	3·40	13·00	14·00	3·89—4·18	7·81— 8·06	7·88— 8·06	3·86—4·01
December	3·30	13·00	14·00	3·98—4·12	7·66— 7·92	7·25— 7·62	3·75—3·90

41.—Yearly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1931.

Source: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	Toronto.	Montreal.	Winnipeg.	Edmonton.
	$	$	$	$
Steers, up to 1,050 lb., good and choice	5·93	5·93	5·40	4·97
Steers, up to 1,050 lb., medium	5·61	5·27	4·38	4·15
Steers, up to 1,050 lb., common	4·61	3·98	3·20	3·35
Steers, over 1,050 lb., good and choice	6·22	6·07	5·45	4·87
Steers, over 1,050 lb., medium	5·70	5·24	4·41	4·08
Steers, over 1,050 lb., common	4·94	4·26	3·32	3·20
Heifers, good and choice	5·92	5·24	4·93	4·83
Heifers, medium	5·55	4·40	3·95	3·96
Calves, fed, good and choice	7·79	7·32	5·86	5·64
Calves, fed, medium	6·90	6·65	4·71	4·91
Calves, veal, good and choice	8·24	7·05	6·67	6·74
Calves, veal, common and medium	5·94	5·19	3·87	4·51
Cows, good	4·10	4·03	3·42	3·34
Cows, medium	3·53	3·36	2·62	2·74
Bulls, good	3·84	4·14	2·49	2·12
Stocker and feeder steers, good	4·70	–	3·63	3·63
Stocker and feeder steers, common	3·83	–	2·42	3·03
Stock cows and heifers, good	–	–	2·92	3·58
Stock cows and heifers, common	4·75	–	2·07	2·67
Hogs, selects	7·94	7·64	6·53	6·25
Hogs, bacon	7·39	7·18	6·09	5·57
Hogs, butchers	7·09	7·12	5·91	5·17
Hogs, heavies	6·15	7·00	6·07	5·03
Hogs, lights and feeders	6·57	7·10	5·32	4·81
Lambs, good handy weights	8·03	7·02	6·49	5·67
Lambs, common, all weights	6·15	5·41	4·40	4·00
Sheep, good handy weights	3·77	3·33	3·19	3·98

42.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1932.

Classification.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Montreal—	$	$	$	$	$	$	$	$	$	$	$	$
Steers, up to 1,050 lb., good and choice	6·08	6·00	5·95	5·72	5·75	6·12	6·05	5·57	5·01	4·41	4·27	4·00
Heifers, good and choice	5·04	4·88	4·81	4·57	5·19	4·76	4·63	4·24	3·64	3·19	3·07	3·28
Calves, veal, good and choice	8·50	8·43	6·26	4·04	4·00	4·40	4·60	5·23	6·26	6·65	6·39	6·44
Hogs, bacon	5·11	5·02	5·10	4·77	4·77	4·78	5·20	5·33	5·64	4·84	4·08	4·02
Hogs, butchers	5·11	5·01	5·10	4·77	4·75	4·78	5·20	5·33	5·62	4·85	4·09	4·03
Lambs, good handy weights	6·69	6·65	6·49	5·50	11·32	7·81	6·40	5·40	5·28	4·72	3·89	4·75
Sheep, good handy weights	3·04	3·48	4·02	3·71	3·62	3·13	1·82	2·16	2·24	2·20	2·10	2·05
Toronto—												
Steers, up to 1,050 lb., good and choice	5·71	5·24	5·13	5·13	5·33	5·85	5·87	5·41	5·27	4·41	4·25	4·10
Heifers, good and choice	5·67	5·19	5·08	5·08	5·28	5·76	5·87	5·33	5·25	4·38	4·19	4·12
Calves, veal, good and choice	7·81	8·13	7·39	5·98	5·29	5·13	5·46	6·06	6·90	7·10	5·60	6·03
Hogs, bacon	5·14	4·94	4·90	4·54	4·51	4·58	5·03	5·21	5·11	4·50	3·92	3·97
Hogs, butchers	–	4·39	4·35	3·99	3·96	4·03	4·48	4·66	4·56	3·95	3·37	3·42
Lambs, good handy weights	7·07	7·19	7·30	7·58	10·53	8·07	7·39	5·97	5·46	4·77	4·72	5·18
Sheep, good handy weights	3·17	3·73	3·90	3·26	2·90	2·20	2·29	2·47	2·08	2·14	2·17	1·93
Winnipeg—												
Steers, up to 1,050 lb., good and choice	5·23	4·91	5·08	5·02	5·12	5·26	4·98	4·77	4·27	3·76	3·66	3·47
Heifers, good and choice	4·95	4·63	4·93	4·69	4·80	4·84	4·50	4·11	3·77	3·47	3·64	3·37
Calves, veal, good and choice	6·86	6·69	5·76	4·90	5·17	4·24	3·90	4·46	4·71	4·58	5·13	5·60
Hogs, bacon	4·05	4·05	4·12	3·83	3·67	3·87	4·38	4·69	4·87	3·78	3·16	3·08
Hogs, butchers	3·55	3·56	3·62	3·34	3·17	3·36	3·89	4·17	4·40	3·30	2·66	2·53
Lambs, good handy weights	5·83	5·97	6·25	6·41	7·38	6·48	5·98	5·03	4·53	3·64	4·08	3·74
Sheep, good handy weights	2·95	2·83	3·00	3·00	3·14	2·64	1·96	1·88	2·00	1·81	1·58	1·50
Calgary—												
Steers, up to 1,050 lb., good and choice	4·58	4·37	4·61	4·81	5·00	4·94	4·22	3·60	3·31	3·06	2·82	2·96
Heifers, good and choice	4·64	4·35	4·46	4·50	4·50	4·47	3·90	3·50	3·37	3·16	3·06	2·96
Calves, veal, good and choice	5·42	5·25	5·46	5·39	5·22	4·73	4·72	4·03	3·85	3·73	3·41	3·40
Hogs, bacon	3·90	3·84	3·79	3·50	3·37	3·46	3·80	4·08	4·47	3·62	3·01	2·85
Hogs, butchers	3·09	3·84	3·29	3·00	2·86	2·96	3·29	3·57	3·96	3·17	2·50	2·35
Lambs, good handy weights	4·65	4·75	4·93	4·89	6·24	6·32	4·34	4·23	4·15	4·09	3·75	3·75
Sheep, good handy weights	3·20	3·24	3·40	3·00	3·24	4·26	2·49	2·37	2·57	2·75	2·33	2·25
Edmonton—												
Steers, up to 1,050 lb., good and choice	4·82	4·63	4·68	4·71	4·82	5·02	4·75	3·60	3·84	3·39	3·25	3·50
Heifers, good and choice	4·60	4·50	4·59	4·57	4·67	4·56	4·61	3·34	3·72	3·03	3·16	3·04
Calves, veal, good and choice	6·00	6·37	6·11	5·02	5·13	3·99	3·75	3·75	4·22	3·78	3·23	3·65
Hogs, bacon	3·82	3·75	3·67	3·40	3·25	3·30	3·67	3·92	4·25	3·37	2·70	2·71
Hogs, butchers	3·82	3·24	3·18	3·92	2·75	2·80	3·16	3·43	3·75	2·86	2·20	2·21
Lambs, good handy weights	4·98	5·27	5·23	5·41	8·20	6·20	4·43	3·94	4·15	3·53	3·37	3·58
Sheep, good handy weights	–	3·75	–	–	4·25	3·86	2·75	2·75	2·71	2·50	2·75	2·75

Index Numbers of Agricultural Prices.—Records of the average prices received by farmers for agricultural produce have been collected annually since 1909 through the crop correspondents of the Census and Statistics Office and the Dominion Bureau of Statistics. From these records, annual index numbers have been calculated for each crop and for the field crops as a whole. In calculating the index numbers in the present instance, the base period used is 1926. Index numbers have been calculated of the yields of the various crops from year to year. From these data index numbers of the value of all field crops, weighted according to the quantity produced in each case, have been obtained. The results of these calculations are presented in Table **43**.

43.—Index Numbers of Producers' Prices of Agricultural Commodities, 1913-32.

NOTE.—Average Prices, 1926 = 100.

For the formulæ used in the calculation see Monthly Bulletin of Agricultural Statistics, March, 1928, p. 94.

Field Crop.	Average Price 1926.[1]	Index Numbers									
		1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
Canada—	$										
Wheat	1·09	61·5	111·9	83·5	120·2	178·0	185·3	217·4	148·6	74·3	78·0
Oats	0·48	66·7	100·0	75·0	106·3	143·8	162·5	166·7	110·4	70·8	79·2
Barley	0·52	80·8	115·3	100·0	158·8	207·7	192·3	236·5	159·6	90·4	88·5
Rye	0·77	85·7	107·8	100·0	142·9	210·4	193·5	181·1	172·7	93·5	75·3
Peas	1·75	63·4	83·4	94·3	126·9	202·3	170·9	163·4	138·3	112·0	105·1
Beans	2·64	71·2	87·5	115·5	204·5	282·2	204·9	169·7	147·0	109·8	108·0
Buckwheat	0·87	73·6	82·8	86·2	123·0	167·8	181·6	172·4	147·1	102·3	96·6
Mixed grains	0·66	83·3	100·0	86·4	133·3	175·8	172·7	206·1	136·4	93·8	90·9
Flaxseed	1·62	59·9	63·6	93·2	125·9	163·6	193·2	254·9	119·8	88·9	106·2
Corn for husking	1·00	64·0	71·0	71·0	107·0	184·0	175·0	134·0	116·0	83·0	83·0
Potatoes	1·47	55·8	55·8	68·0	91·8	115·0	110·9	107·5	110·2	87·1	61·2
Turnips, etc.	0·60	93·3	90·0	80·0	130·0	153·3	141·7	163·3	138·3	111·7	90·0
Hay and clover	12·13	94·6	117·3	118·4	95·6	85·2	134·0	170·8	215·2	194·2	111·0
Grain hay	10·11	–	–	–	–	–	–	286·8	327·6	–	127·3
Alfalfa	13·30	89·1	106·5	95·3	80·4	87·1	134·1	164·3	178·8	150·0	96·0
Fodder corn	4·88	98·0	100·6	100·6	100·8	105·3	126·0	141·8	158·8	144·5	101·8
Sugar beets	6·45	94·9	92·9	85·3	96·1	104·7	158·9	168·4	198·4	100·8	122·2
All Field Crops	–	**69·6**	**98·3**	**83·7**	**106·7**	**138·7**	**158·5**	**178·7**	**149·3**	**101·1**	**86·6**

Field Crop.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Canada—										
Wheat	61·5	111·9	112·8	100·0	91·7	73·4	96·3	44·9	34·9	27·5
Oats	68·8	102·1	87·5	100·0	106·3	97·9	122·9	50·0	50·0	37·5
Barley	80·8	134·6	101·9	100·0	126·9	107·7	113·5	35·5	50·0	38·5
Rye	63·6	128·6	100·0	100·0	106·5	102·6	109·1	26·0	36·4	22·1
Peas	98·3	100·0	94·3	100·0	100·6	105·7	117·7	84·0	48·0	48·6
Beans	100·8	104·9	97·7	100·0	87·9	135·2	125·0	86·0	26·1	20·8
Buckwheat	96·6	102·3	97·7	100·0	102·3	106·9	108·0	74·7	57·5	48·3
Mixed grains	89·4	107·6	98·5	100·0	109·0	107·8	115·2	63·6	56·1	50·0
Flaxseed	109·3	119·8	114·2	100·0	95·7	98·1	146·9	58·6	48·8	32·1
Corn for husking	92·0	119·0	94·0	100·0	99·0	112·0	106·0	87·0	42·0	45·0
Potatoes	69·4	57·8	140·1	100·0	79·6	54·4	108·2	56·5	29·2	42·2
Turnips, etc.	98·3	73·3	93·3	100·0	76·7	78·3	88·3	73·3	46·7	45·0
Hay and clover	90·4	91·3	85·3	100·0	85·8	85·5	96·0	81·0	62·8	58·5
Grain hay	34·3	91·5	91·5	100·0	100·0	99·7	95·0	66·6	60·6	60·1
Alfalfa	87·1	88·0	95·6	100·0	90·5	86·5	94·1	91·1	78·0	64·3
Fodder corn	94·7	104·9	82·6	100·0	91·6	96·1	106·2	101·0	81·4	56·4
Sugar beets	100·5	105·3	94·3	100·0	120·8	112·4	119·2	106·5	94·9	82·5
All Field Crops	**72·4**	**102·3**	**102·1**	**100·0**	**96·5**	**84·6**	**104·9**	**56·3**	**46·9**	**40·4**

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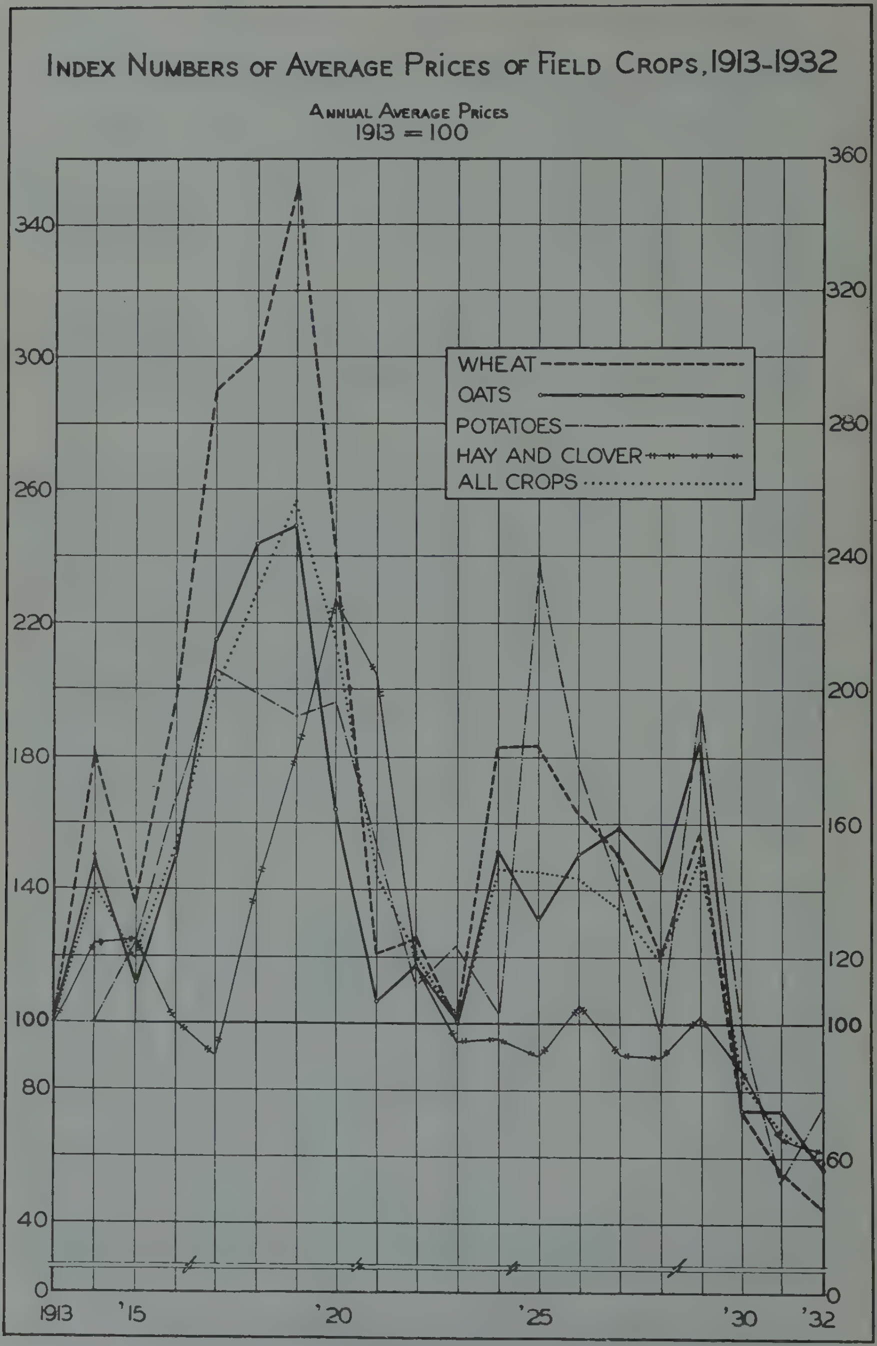
[1] Prices quoted are per bushel, except for potatoes and turnips, etc., which are per cwt., and the last five items, which are per ton. For details of index numbers by provinces, see Monthly Bulletin of Agricultural Statistics, January, 1933, pp. 13-20.

The general index number fell from 1924 to 1928, especially from 1926 to 1928, recovered strongly in 1929 but declined rapidly to reach the record low of 40·4 for


Index Numbers of Average Prices of Field Crops, 1913-1932
Annual Average Prices
1913 = 100
WHEAT
OATS
POTATOES
HAY AND CLOVER
ALL CROPS
340
300
260
220
180
140
100
80
40
0
360
320
280
240
200
160
120
100
60
0
1913
'15
'20
'25
'30
'32

the period under review, in 1932. The commodities responsible for the decline from 1927 to 1928 were the cereals and potatoes. The root and forage crops held fairly steady and there were increases in peas, beans and buckwheat.

The severe decline of 1930 was accentuated in 1931 and marked by reductions in the prices obtained for all the agricultural commodities listed with the exceptions of oats, rye and barley. Reductions in the prices of wheat, flaxseed, corn and potatoes were again drastic; wheat, which has the greatest weight in the index, was mainly responsible for the decline of 55·4 points in the general index between 1924 and 1931, as well as for the temporary recovery in 1929. In 1932 prices of all crops continued to decline with the exceptions of potatoes, which showed a marked increase as compared with 1931, corn for husking and peas.

Subsection 10.—Agricultural Statistics of the Census

A selection of the more important agricultural statistics of the census of 1921 was published at pp. 269-271 of the 1929 edition of the Year Book. Further, certain agricultural statistics of the Prairie Provinces collected at their quinquennial census of 1926 were published at pp. 271-273 of the same volume. The complete agricultural statistics of the census of 1921 are published in Volume V of the publications of the census of that year, while the detailed agricultural statistics of the census of the Prairie Provinces of 1926 will be found in the reports of the census of that year, issued separately for the provinces of Manitoba, Saskatchewan and Alberta.

Such agricultural statistics of the census of 1931 as are available at the time of going to press will be found in Appendix II at the end of this volume.

Subsection 11.—Miscellaneous Agricultural Statistics.

Agricultural Irrigation.[1]—The surface waters in Alberta are vested in the Crown and are administered by the Water Resources Office under the Water Resources Act. All matters affecting the control of water supply generally, as well as the inspection and authorization of works for the use of water for domestic, municipal, industrial, irrigation and other purposes and the granting of licences for such purposes are dealt with thereunder. The Director of Water Resources at Edmonton is responsible for all field administration. The Irrigation Districts Act of Alberta (R.S.A., 1922, c. 114) and amending statutes provide for the formation of irrigation districts, and authorize the raising of loans under by-laws adopted by the voters of the district. Table **44** gives statistics of the larger irrigation projects in Alberta for the year 1931.

44.—Major Irrigation Projects in Southern Alberta, 1931.

Project.	Source of Supply.	Irrigable Area.	Length of Canals.	Area Irrigated in 1931.
		acres.	miles.	acres.
C.P.R. Western Section	Bow river	218,980	1,566	47,593
C.P.R. Eastern Section	Bow river	400,000	2,500	90,724
C.P.R. Lethbridge Section	St. Mary river	89,000	196	68,089
Canada Land and Irrigation Co., Ltd	Bow river	130,000	431	26,015
Taber Irrigation District	St. Mary river	21,499	96	19,914
Lethbridge Northern Irrigation District	Oldman river	99,910	573	70,408
United Irrigation District	Belly river	34,235	175	12,983
New West Irrigation District	Bow river	4,501	23	3,156
Magrath Irrigation District	St. Mary river	6,975	90	3,400
Raymond Irrigation District	St. Mary river	15,129	15	9,000
Totals		**1,020,229**	**5,665**	**351,282**

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[1] Revised by L. C. Charlesworth, Director, Water Resources, Province of Alberta.

The Canadian Pacific Railway Co. has constructed, and is operating in Alberta, three large projects known as the Eastern, Western and Lethbridge sections, the last named being the oldest irrigation project in Alberta. The area irrigable by these projects is 707,980 acres. By agreement with the Canadian Pacific Railway Co., the Taber, Magrath and Raymond irrigation districts procure their water supply from the main canal of the Lethbridge section, a further 43,603 acres being served by the canals of these districts.

The total irrigable area served by the Canada Land and Irrigation Co.'s project is 130,000 acres, while the New West irrigation district, by agreement with the Canada Land and Irrigation Co., receives a water supply for a further irrigable area of 4,501 acres.

In addition to the irrigated tracts enumerated in the above table, there were, at Dec. 31, 1931 about 335 privately owned projects in Alberta, with a possible irrigable area of 56,019 acres.

Average Value of Farm Lands.—Statistics showing the average value of farm lands in Canada in 1910 and from 1915 to 1932, are given in Table **45.** The values are as estimated by crop correspondents and show the rise in land values between 1915 and 1920, the general decline with moderate fluctuations since the latter date and the rapid fall since 1929 to a point below the 1910 level for the country as a whole.

45.—Average Values per Acre of Occupied Farm Lands[1] in Canada, as Estimated by Crop Correspondents, 1910, 1915-32.

Province.	1910	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Canada	**33**	**35**	**36**	**38**	**41**	**46**	**48**	**40**	**40**	**37**	**37**	**38**	**37**	**38**	**38**	**37**	**32**	**28**	**23**
P.E.I.	31	38	39	44	44	51	49	46	45	51	40	45	46	41	44	43	42	34	31
N.S.	25	28	34	34	36	41	43	35	34	31	33	37	36	37	34	36	30	29	28
N.B.	19	22	29	29	35	32	35	28	32	32	27	34	31	30	31	35	28	26	24
Quebec	43	51	52	53	57	72	70	59	58	56	53	54	53	57	54	55	48	40	37
Ontario	48	52	53	55	57	66	70	63	64	64	65	67	62	65	62	60	52	46	33
Manitoba	29	30	32	31	32	35	39	35	32	28	28	29	29	27	27	26	22	18	16
Sask.	22	24	23	26	29	32	32	29	28	24	24[2]	24	25	26	27	25	22	19	16
Alberta	24	23	22	27	28	29	32	28	24	24	25	26	26	26	28	28	24	20	17
B.C.	74	125	119	149	149	174	175	122	120	100	96	88	80	89	90	90	76	74	65

[1] Orchards and fruit lands, 1932, with 1931 in brackets: Nova Scotia $85 ($94); Ontario $83 ($110); British Columbia $275 ($300).

[2] Actual returns were not collected from crop correspondents in Saskatchewan for 1924, and the estimate of 1924 is interpolated.

Subsection 12.—International Agricultural Statistics.

World Production of Cereals and Potatoes.—Table 46, constructed from data published by the International Institute of Agriculture, shows the areas and yields of wheat, oats, barley, rye, corn and potatoes for the years 1931 and 1932 in countries of the Northern Hemisphere, and for the years 1931-32 and 1932-33 in countries of the Southern Hemisphere. The annual average acreages and yields are also given for the five-year period, 1926-30 (1926-27 to 1930-31), and the areas and yields of 1932 (1932-33) are compared in percentages with those of the five-year period.

Wheat.—For 49 countries the production of wheat in 1932 was 3,677,411,000 bushels from 334,147,000 acres, as compared with 3,768,440,000 bushels from 340,693,000 acres in 1931 and 3,684,530,000 bushels from 319,148,000 acres, the five-year average, 1926-30 (1926-27 to 1930-31). Due to a decrease in wheat acreage between 1931 and 1932 the total production decreased 91,029,000 bushels or 2·4 p.c. As compared with the five-year average, the 1932 acreage was 4·7 p.c. greater and the production 0·1 p.c. less.

Oats.—The statistics of 38 countries show a total production in 1932 of 3,638,766,000 bushels from 137,264,000 acres, as compared with 3,269,816,000 bushels from 144,024,000 acres in 1931 and with 4,629,455,000 bushels from 146,508,000 acres, the five-year average. The 1932 area was 4·7 p.c. less and the production 11·3 p.c. greater than in 1931. As compared with the five-year average, the 1932 area was nearly 6·3 p.c. less and the production 21·4 p.c. less.

Barley.—In 45 countries, the total yield in 1932 was 1,478,091,000 bushels from 77,589,000 acres, as compared with 1,293,938,000 bushels from 79,728,000 acres in 1931 and 1,695,902,000 bushels from 79,995,000 acres, the five-year average. The area in 1932 was 2·9 p.c. less and the yield 14·2 p.c. greater than in 1931 and, compared with the five-year average, the acreage in 1932 was 3·0 p.c. less and the yield 12·8 p.c. less.

Rye.—The statistics available for 31 countries show that the production in 1932 was 1,069,235,000 bushels from 112,257,000 acres, as compared with 836,574,000 bushels from 115,428,000 acres in 1931 and 1,817,573,000 bushels from 113,457,000 acres, the five-year average. The area in 1932 was 2·7 p.c. less and the production 27·8 p.c. greater than in 1931. Compared with the five-year average, the 1932 acreage was 1·1 p.c. less and the production 41·2 p.c. less.

Corn.—In 23 countries, the production in 1932 was 3,802,216,000 bushels from 156,959,000 acres, as compared with 3,370,121,000 bushels from 156,060,000 acres in 1931 and 3,429,249,000 bushels from 146,943,000 acres, the five-year average. The area for 1932 was 0·6 p.c. more and the production 12·8 p.c. more than in 1931 and, compared with the five-year average, the 1932 area was 6·8 p.c. more and the production 10·9 p.c. greater.

Potatoes.—In 32 countries, the total yield in 1932 was 5,627,186,000 bushels from 44,586,000 acres, as compared with 5,425,816,000 bushels from 45,697,000 acres in 1931 and with 6,670,768,000 bushels from 43,149,000 acres, the five-year average. The 1932 acreage is 2·4 p.c. less and the production 3·7 p.c. greater than in 1931 while, as compared with the five-year average, the 1932 acreage was 3·3 p.c. more and the production 15·6 p.c. less.

46.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1931 and 1932, with Five-Year Average for 1926-30.

Crop and Country.	Acreages.				Yields.			
	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.
Wheat—	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
NORTHERN HEMISPHERE.								
EUROPE.								
Austria	517	536	508	105·5	11,009	13,007	11,576	112·4
Belgium	381	386	384	100·5	13,817	15,376	14,551	105·7
Bulgaria	3,053	3,078	2,754	111·7	63,830	50,553	43,666	115·8
Czechoslovakia	2,047	2,064	1,899	108·7	41,232	53,736	48,428	111·0
Denmark	259	245	257	95·3	10,053	10,655	10,475	101·7
Estonia	99	128	74	172·3	1,738	2,085	1,178	177·0
Finland	47	50	40	126·6	1,161	1,260	923	136·5
France	12,840	13,235	13,052	101·4	264,116	331,357	270,906	122·3
Germany	5,356	5,634	4,181	134·8	155,545	183,829	123,964	148·3
Great Britain and Northern Ireland	1,200	1,291	1,465	88·1	35,993	41,374	47,483	87·7
Greece	1,496	1,496	1,300	115·1	16,961	11,228	11,920	142·3
Hungary	4,011	3,897	3,953	98·6	72,550	58,593	82,075	71·4
Irish Free State	21	21	30	71·0	781	831	1,208	68·8
Italy	11,884	12,237	12,083	101·3	244,782	276,127	223,048	123·8
Latvia	215	255	151	168·7	3,388	5,292	2,679	197·6
Lithuania	478	514	401	128·1	8,340	9,359	7,287	128·4
Luxemburg	23	22	30	73·9	407	496	551	90·0
Malta	10	10	9	103·9	277	301	298	101·0
Netherlands	192	293	137	212·9	6,751	13,694	6,100	224·5
Norway	29	28	27	103·1	592	785	692	113·4
Poland	4,495	4,266	3,477	122·7	83,220	49,472	64,197	77·1
Portugal	1,271	–	1,082	–	12,999	18,138	10,437	173·8
Roumania	8,566	7,091	7,625	93·0	135,299	59,660	110,736	53·9
Russia[2]	92,074	85,940	74,445	115·4	–	–	840,238	–
Scotland	50	52	57	91·9	1,792	2,240	2,225	100·7
Spain	11,245	11,249	10,786	104·3	134,426	184,206	143,001	128·8
Sweden	683	746	544	137·2	18,048	26,500	17,126	154·7
Switzerland	179	182	175	103·8	5,489	5,647	5,619	100·5
Turkey	8,773	8,555	6,135	139·4	102,426	69,344	75,484	91·9
Yugoslavia	5,289	4,820	4,768	101·1	98,789	53,444	81,322	65·7
AMERICA.								
Canada	26,201	27,182	23,926	113·6	326,325	428,514	435,744	98·3
Mexico	1,501	1,066	1,278	83·4	16,226	8,921	11,207	79·6
United States	55,344	55,177	59,445	92·8	900,219	726,831	858,926	84·6
ASIA.								
Cyprus	183	172	181	94·9	1,623	1,182	1,824	64·8
India	32,189	33,749	31,485	107·2	347,387	336,971	332,005	101·5
Japan	1,228	1,247	1,185	105·2	30,892	31,336	29,699	105·5
Korea	817	–	882	–	8,340	8,305	9,037	91·9
Syria and Lebanon	1,167	1,087	1,118	97·2	13,753	9,825	13,971	70·3
AFRICA.								
Algeria	3,640	3,703	3,738	99·1	25,649	32,518	29,592	109·9
Egypt	1,649	1,762	1,583	111·3	46,072	52,586	40,766	129·0
Eritrea	22	15	23	65·8	29	145	73	198·6
French Morocco	2,537	2,450	2,699	90·8	29,783	21,965	27,588	79·6
Kenya	43	41	67	60·5	290	317	674	47·0
Tunis	1,977	2,100	1,774	118·4	13,962	14,697	11,508	127·7
SOUTHERN HEMISPHERE.[1]								
Argentina	16,029	17,789	19,401	91·7	219,697	235,376	251,255	93·7
Australia	14,500	15,585	14,387	108·3	189,653	200,000	155,748	128·4
Chile	1,517	1,570	1,635	86·1	21,187	–	27,661	–
New Zealand	550	294	490	60·0	6,583	10,000	8,229	121·5
Union of South Africa	1,736	–	966	–	13,713	9,333	8,175	114·2
Uruguay	1,080	843	1,056	79·8	11,246	–	11,693	–
Totals	**340,693**	**334,147**	**319,148**	**104·7**	**3,768,440**	**3,677,411**	**3,684,530**	**99·9**

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[1] The statistics of the Southern Hemisphere are given for the years 1931-32 and 1932-33; the averages are for the five-year period 1926-27 to 1930-31 and the percentage columns give 1932-33 figures as percentages of the averages.

[2] Russia not included in totals.

46.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1931 and 1932, with Five-Year Average for 1926-30—continued.

Crop and Country.	Acreages.				Yields.			
	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.
Oats—	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
NORTHERN HEMISPHERE.								
EUROPE.								
Austria	777	784	759	103·4	22,877	31,312	30,141	103·9
Belgium	729	712	682	104·4	48,384	52,385	47,013	111·4
Bulgaria	293	281	335	83·9	7,060	7,777	7,272	106·9
Czechoslovakia	2,031	2,020	2,073	97·4	84,368	114,628	96,276	119·1
Denmark	937	983	999	98·4	64,448	72,339	66,832	108·2
Estonia	367	356	356	100·0	11,296	8,966	8,772	102·2
Finland	1,149	1,119	1,100	101·8	45,886	45,539	40,475	112·5
France	8,564	8,418	8,584	98·1	316,288	353,383	341,352	103·5
Germany	8,310	8,118	8,634	94·0	427,482	458,160	450,653	101·7
Great Britain and Northern Ireland	2,773	2,730	3,007	90·8	146,160	150,993	168,487	95·0
Greece	344	367	279	131·4	5,274	6,910	4,985	138·6
Hungary	596	575	665	86·4	18,368	19,510	24,227	80·5
Irish Free State	623	623	650	95·8	36,457	43,904	45,713	96·0
Italy	1,146	1,113	1,255	88·6	39,467	41,805	40,974	102·0
Latvia	795	802	735	109·1	23,611	22,252	17,644	126·1
Lithuania	900	931	828	112·4	28,065	24,940	22,846	109·2
Luxemburg	75	74	72	102·9	2,721	3,514	3,076	114·2
Netherlands	369	350	378	92·5	19,784	20,916	22,941	91·2
Norway	237	235	241	97·4	9,494	13,282	12,889	103·1
Poland	5,367	5,486	5,125	107·0	159,109	164,714	163,668	100·6
Portugal	422	–	443	–	6,331	7,355	5,735	128·2
Roumania	2,154	1,956	2,757	71·0	46,175	44,276	76,107	58·2
Russia[2]	42,492	35,149	43,286	81·2	–	–	1,070,551	–
Spain	1,986	1,926	1,902	101·3	41,670	57,215	41,664	137·3
Sweden	1,590	1,579	1,729	91·3	69,767	81,845	80,835	101·2
Switzerland	45	41	50	81·4	2,308	2,042	2,894	81·0
Yugoslavia	936	810	937	86·4	18,242	18,548	22,759	81·5
AMERICA.								
Canada	12,871	13,148	12,971	101·4	348,795	416,034	421,014	98·8
United States	39,800	41,224	40,202	102·5	1,117,970	1,242,437	1,189,317	104·5
ASIA.								
Syria and Lebanon	27	28	42	66·6	711	934	897	104·1
Cyprus	13	11	14	83·8	262	126	266	47·5
Turkey	405	294	336	87·4	8,095	8,729	7,380	118·3
AFRICA.								
Algeria	557	504	605	83·4	8,212	7,096	13,028	54·5
French Morocco	60	63	82	77·2	1,660	1,591	1,992	79·9
Tunis	67	86	109	79·3	2,274	1,929	2,429	79·1
SOUTHERN HEMISPHERE.[1]								
Argentina	3,470	3,652	3,535	103·3	69,280	69,583	62,603	111·1
Chile	166	174	203	86·0	4,923	–	6,785	–
New Zealand	433	407	407	100·0	3,435	5,302	4,459	118·9
Uruguay	148	135	141	95·6	3,107	–	2,504	–
Totals	**144,024**	**137,264**	**146,508**	**93·7**	**3,269,816**	**3,638,766**	**4,629,455**	**78·6**

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[1] The statistics of the Southern Hemisphere are given for the years 1931-32 and 1932-33; the averages are for the five-year period 1926-27 to 1930-31 and the percentage columns give 1932-33 figures as percentages of the averages.

[2] Russia not included in totals.

46.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1931 and 1932, with Five-Year Average for 1926-30—continued.

Crop and Country.	Acreages.				Yields.			
	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.
	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
Barley—								
NORTHERN HEMISPHERE.								
EUROPE.								
Austria	416	428	387	110·6	9,948	13,862	11,523	120·3
Belgium	70	89	78	113·4	3,552	4,701	3,879	121·2
Bulgaria	605	568	591	96·3	15,861	14,102	13,765	102·5
Czechoslovakia	1,775	1,759	1,753	100·3	49,357	69,121	59,057	117·0
Denmark	889	851	863	98·6	43,974	45,471	43,882	103·6
Estonia	279	266	283	93·9	5,918	4,654	5,233	88·9
Finland	276	300	276	108·8	6,430	8,015	6,708	119·5
France	1,865	1,859	1,721	108·0	47,732	53,680	49,801	107·8
Germany	4,001	3,875	3,733	103·8	138,627	147,653	134,011	110·2
Great Britain and Northern Ireland	1,030	964	1,106	87·2	36,092	35,846	42,376	84·6
Greece	550	574	472	121·6	7,146	9,862	6,945	142·0
Hungary	1,165	1,165	1,077	108·2	21,867	32,498	27,765	117·0
Irish Free State	116	103	125	82·4	4,921	4,974	6,122	81·3
Italy	538	530	579	91·6	11,062	11,537	10,953	105·3
Latvia	451	457	436	104·8	8,809	8,849	7,213	122·7
Lithuania	474	495	499	99·2	10,845	10,173	9,992	101·8
Luxemburg	11	10	9	114·1	266	276	240	115·0
Malta	7	6	7	94·0	285	269	294	91·8
Netherlands	71	50	71	70·0	3,274	2,710	4,084	66·4
Norway	138	137	142	96·6	4,207	5,578	4,877	114·4
Poland	3,144	2,982	2,905	102·6	67,781	64,341	65,598	98·1
Portugal	170	–	175	–	2,025	2,398	1,845	130·0
Roumania	4,742	4,416	4,494	98·2	64,964	67,479	87,906	76·8
Russia[2]	16,854	16,329	18,169	89·9	–	–	271,024	–
Scotland	88	69	112	61·6	3,453	3,080	4,685	65·7
Spain	4,644	4,837	4,481	107·9	90,727	132,569	94,304	140·6
Sweden	311	293	333	87·9	10,716	10,904	11,237	97·0
Switzerland	18	17	16	107·7	565	597	549	108·9
Yugoslavia	1,065	1,006	986	102·0	18,000	17,982	17,464	103·0
AMERICA.								
Canada	3,768	3,758	4,704	79·9	67,383	80,773	114,158	70·8
United States	11,419	13,213	11,232	117·6	198,389	299,950	263,969	113·6
ASIA.								
Japan	2,097	2,107	2,265	93·0	76,522	77,744	80,980	96·0
Korea	2,410	–	2,252	–	41,862	44,086	36,702	120·1
Syria and Lebanon	818	766	746	102·7	14,193	9,163	17,291	53·0
Cyprus	93	94	118	79·8	1,387	976	2,314	42·2
Turkey	3,769	3,401	3,140	108·3	74,877	53,499	54,290	98·5
AFRICA.								
Algeria	3,178	3,279	3,505	93·6	27,069	29,855	35,181	84·9
Egypt	306	366	364	100·4	9,694	12,067	11,206	107·7
Eritrea	62	99	54	183·5	928	1,286	299	429·4
French Morocco	3,222	2,930	2,995	97·8	59,032	37,254	45,695	81·5
Tunis	1,223	1,483	1,235	120·1	8,268	15,616	8,465	184·5
SOUTHERN HEMISPHERE.[1]								
Argentina	1,439	1,520	1,276	119·1	22,125	32,151	15,976	201·3
Chile	106	111	167	66·7	3,097	–	4,980	–
New Zealand	45	19	47	40·4	560	490	933	52·5
Uruguay	10	10	9	117·0	148	–	138	–
Totals	**79,728**	**77,589**	**79,995**	**97·0**	**1,293,938**	**1,478,091**	**1,695,902**	**87·2**

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[1] The statistics of the Southern Hemisphere are given for the years 1931-32 and 1932-33; the averages are for the five-year period 1926-27 to 1930-31 and the percentage columns give 1932-33 figures as percentages of the average.

[2] Russia not included in totals.

46.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1931 and 1932, with Five-Year Average for 1926-30—continued.

Crop and Country.	Acreages.				Yields.			
	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.
Rye—	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
NORTHERN HEMISPHERE.								
EUROPE.								
Austria	934	944	942	100·3	18,931	23,853	19,898	119·9
Belgium	553	562	569	98·8	20,483	23,662	21,182	111·7
Bulgaria	600	544	521	104·4	10,653	10,136	8,422	120·3
Czechoslovakia	2,470	2,569	2,584	99·4	54,631	85,661	65,651	130·5
Denmark	332	296	415	71·3	8,405	8,661	10,593	81·8
Estonia	356	364	351	103·5	5,820	7,113	6,277	113·3
Finland	554	544	540	100·7	11,792	13,641	11,898	114·7
France	1,760	1,755	1,899	92·4	29,519	35,188	32,594	108·0
Germany	10,788	10,996	11,616	94·7	262,982	329,262	295,018	111·2
Greece	172	181	131	138·3	1,800	2,438	1,603	152·0
Hungary	1,486	1,574	1,631	96·5	21,672	32,205	29,240	110·1
Italy	304	294	305	96·2	6,521	6,400	6,401	100·0
Latvia	572	593	628	94·5	5,615	11,793	9,729	121·2
Lithuania	1,257	1,195	1,164	102·7	16,282	20,808	20,192	103·1
Luxemburg	16	17	18	97·1	336	413	391	105·7
Netherlands	445	407	485	84·1	14,167	13,660	15,532	88·0
Norway	15	16	20	79·8	378	527	569	92·7
Poland	14,263	13,951	14,078	99·1	224,504	240,560	245,246	98·1
Portugal	427	–	407	–	5,070	6,411	4,369	146·7
Roumania	1,006	861	779	110·4	13,962	10,512	12,721	82·6
Russia (Soviet Union)[2]	68,380	65,731	65,482	100·4	–	–	878,629	–
Spain	1,516	1,516	1,658	91·4	21,103	25,905	22,179	116·8
Sweden	511	516	686	75·2	11,745	17,094	17,723	96·5
Switzerland	46	45	49	92·3	1,402	1,488	1,597	93·2
Turkey	834	504	611	82·5	13,961	7,800	8,363	93·3
Yugoslavia	603	600	542	110·8	7,614	8,328	7,399	112·5
AMERICA.								
Canada	778	774	955	81·0	5,322	8,938	15,509	57·6
United States	3,060	3,271	3,312	98·8	32,026	39,855	40,542	98·3
AFRICA.								
Algeria	3	4	4	109·6	37	35	49	71·8
French Morocco	2	2	2	105·3	14	–	19	–
SOUTHERN HEMISPHERE.[1]								
Argentina	1,378	1,624	1,065	152·4	9,744	12,992	6,311	205·9
Chile	7	7	8	92·1	82	–	127	–
Totals	**115,428**	**112,257**	**113,457**	**98·9**	**836,574**	**1,069,235**	**1,817,573**	**58·8**
Corn—								
NORTHERN HEMISPHERE.								
EUROPE.								
Austria	152	148	145	102·4	4,990	4,803	4,479	107·2
Bulgaria	1,682	1,829	1,693	108·0	34,989	41,511	27,212	152·5
Czechoslovakia	344	331	347	95·6	8,965	12,176	9,415	129·3
France	855	813	843	96·5	24,623	17,924	17,312	103·5
Greece	618	587	513	114·5	6,248	3,900	6,423	61·3
Hungary	2,720	2,877	2,652	108·5	59,749	95,894	64,102	149·6
Italy	3,450	3,581	3,740	95·7	76,620	118,705	97,529	121·7
Poland	243	240	222	108·2	4,099	–	3,515	–
Portugal	939	–	861	–	17,543	15,976	14,673	108·9
Roumania	11,749	11,775	10,851	108·5	238,704	213,771	181,374	117·9
Russia (Soviet Union)[2]	9,741	9,084	8,483	107·1	–	–	124,325	–
Spain	1,053	1,102	1,044	105·6	26,389	27,286	23,598	115·6
Switzerland	3	2	3	75·9	114	106	138	77·1
Yugoslavia	6,168	6,442	5,734	112·4	126,113	177,940	117,711	151·2

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[1] The statistics of the Southern Hemisphere are given for the years 1931-32 and 1932-33; the averages are for the five-year period 1926-27 to 1930-31 and the percentage columns give 1932-33 figures as percentages of the average.

[2] Not included in totals.

46.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1931 and 1932, with Five-Year Average for 1926-30—concluded.

Crop and Country.	Acreages.				Yields.			
	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.	1931.	1932.	Average 1926-30.	1932 in p.c. of Average.
Corn—concluded.	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
AMERICA.								
Canada	132	130	159	81·9	5,449	5,057	5,665	89·3
Mexico	8,346	7,945	7,692	103·3	84,196	76,458	73,196	104·5
United States	105,301	107,729	99,456	108·3	2,567,306	2,908,045	2,573,710	113·0
ASIA.								
Syria and Lebanon	65	44	120	37·0	1,303	719	2,415	29·8
AFRICA.								
Algeria	24	16	24	68·6	238	181	257	70·4
Tunis	45	44	41	108·2	197	217	194	111·3
Eritrea	22	7	16	47·6	429	118	174	67·9
Kenya	161	166	199	83·7	2,724	4,989	5,008	99·6
Italian Somaliland	53	24	39	61·0	931	380	745	51·0
Egypt	2,194	2,043	2,066	98·9	78,202	76,060	76,079	100·0
SOUTHERN HEMISPHERE.[1]								
Argentina[2]	23,899	24,958	21,893	114·0	284,831	–	314,634	–
Chile	–	–	–	–	–	–	–	–
Totals	**156,060**	**156,959**	**146,943**	**106·8**	**3,370,121**	–	**3,429,249**	**110·9**
Potatoes—								
NORTHERN HEMISPHERE.								
EUROPE.								
Austria	479	511	459	111·3	99,823	83,723	87,512	95·7
Belgium	425	435	410	106·3	131,425	163,103	123,567	132·0
Bulgaria	31	37	28	134·3	2,231	3,556	1,576	225·7
Czechoslovakia	1,775	1,807	1,793	100·8	357,375	340,841	324,594	105·0
Denmark	157	172	169	101·8	32,236	49,236	33,793	145·7
Estonia	168	166	166	99·9	31,398	28,762	27,813	103·4
Finland	174	192	173	111·1	26,661	36,945	29,030	127·3
France	3,533	3,480	3,589	97·0	598,904	583,041	514,588	113·3
Germany	6,979	7,114	6,943	102·5	1,611,787	1,727,529	1,440,527	119·9
Great Britain and Northern Ireland	709	795	779	102·1	143,770	207,951	191,640	108·5
Greece	34	34	27	118·5	2,306	2,849	1,513	188·3
Hungary	701	729	658	110·9	53,185	61,927	68,781	90·0
Irish Free State	346	348	363	96·0	72,132	112,576	89,341	126·0
Italy	1,019	1,022	870	117·5	72,184	103,750	71,339	145·4
Latvia	247	253	207	122·0	42,880	44,280	31,075	142·5
Lithuania	409	427	347	123·0	72,089	67,134	56,072	119·7
Luxemburg	41	40	40	99·0	7,832	8,524	6,086	140·1
Malta	7	7	7	100·3	1,117	941	1,060	88·7
Netherlands	406	434	428	101·5	100,535	135,215	121,253	111·5
Norway	116	123	120	103·0	28,451	38,029	30,249	125·7
Poland	6,716	6,709	6,250	107·3	1,138,609	1,101,357	1,017,513	108·2
Roumania	474	471	484	97·3	67,981	–	72,437	–
Russia (Soviet Union)[2]	15,104	13,732	13,671	–	–	–	1,650,221	–
Spain	1,024	1,042	832	125·2	171,846	188,526	142,623	132·2
Sweden	327	338	354	95·3	55,033	78,397	60,846	128·8
Switzerland	113	115	119	97·0	28,164	24,688	24,952	98·9
AMERICA.								
Canada	584	522	562	92·9	87,175	65,693	77,252	85·0
United States	3,375	3,368	3,097	108·8	375,310	356,589	356,671	100·0
ASIA.								
Cyprus	6	6	8	79·5	751	827	645	128·3
Syria and Lebanon	20	18	16	115·6	1,619	1,224	1,815	67·5
Java and Madura	44	57	50	114·5	2,936	4,042	3,421	118·2
Turkey	101	82	75	109·7	5,284	2,637	2,916	90·4
AFRICA.								
Algeria	53	52	55	94·5	2,787	3,306	2,987	110·7
Totals	**45,697**	**44,586**	**43,149**	**103·3**	**5,425,816**	**5,627,186**	**6,670,768**	**84·4**

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[1] The statistics of the Southern Hemisphere are for the years 1931-32 and 1932-33; the averages are for the five-year period 1926-27 to 1930-31 and the percentage columns give 1932-33 figures as percentages of the average.

[2] Not included in totals.

World Exports and Imports of Wheat and Flour.—Statistics showing the exports and imports of wheat and wheat flour for the principal countries of the world in the crop year ended July 31, 1932, with comparative figures for the previous crop year, are shown in Table **47.** This information is taken from data published by the International Institute of Agriculture. During the crop year 1931-32, a total of 705,799,000 bushels of wheat is shown as exported, as compared with 705,140,000 bushels in the previous year.

The four chief exporting countries made the following contributions during the crop year 1931-32, the figures for the previous year being shown within brackets, in bushels: Canada 182,803,000 (228,536,000); Argentina 136,725,000 (119,540,000); Australia 122,987,000 (127,506,000); United States 88,007,000 (77,175,000). Exports of flour amounted to 31,658,000 barrels and 37,154,000 barrels during the crop years 1931-32 and 1930-31. Shipments from the United States totalled 7,699,000 barrels in 1931-32 as compared with 11,786,000 barrels in 1930-31; from Australia 7,140,000 and 5,308,000 barrels and from Canada 5,383,000 and 6,702,000 barrels respectively. Canada was the largest exporter of wheat and of wheat and wheat flour combined, occupying third place as exporter of wheat flour in 1932.

The total imports of wheat by the leading importing countries for the crop year ended July 31, 1932, amounted to 637,971,000 bushels, as compared with 634,128,000 bushels for the previous year. Great Britain and Northern Ireland imported 229,435,000 bushels as compared with 207,580,000 bushels in 1930-31; France 88,566,000 bushels as against 77,660,000 bushels; Belgium 52,462,000 bushels as against 51,973,000 bushels; Italy 37,599,000 as against 83,524,000 bushels; Germany 35,009,000 as against 31,342,000 bushels. Great Britain and Northern Ireland imported 5,726,000 barrels of wheat flour as compared with 6,539,000 barrels in the previous year; Irish Free State was next with 2,034,000 barrels as compared with 1,883,000 barrels and Egypt 1,232,000 barrels as compared with 1,666,000 barrels.

47.—Exports of Wheat and Flour from the Principal Wheat-Exporting Countries and Imports of Wheat and Flour to the Principal Wheat-Importing Countries, crop years ended July 31, 1931 and 1932.

Wheat.	Twelve months, Aug. 1-July 31.		Flour.	Twelve months, Aug. 1-July 31.	
	1930-31.	1931-32.		1930-31.	1931-32.
	000 bush.	000 bush.		000 brl.	000 brl.
Exports—			Exports—		
United States	77,175	88,007	United States	11,786	7,699
Canada	228,536	182,803	Canada	6,702	5,383
Argentina	119,540	136,725	Argentina	1,048	770
Australia	127,506	122,987	Australia	5,308	7,140
India	3,731	305	India	526	426
Hungary	8,745	13,187	Hungary	2,045	1,087
Roumania	15,090	35,336	Roumania	215	436
Yugoslavia	5,412	14,660	Japan	1,606	1,348
Other countries	119,405	111,789	Other countries	7,918	7,369
Totals	**705,140**	**705,799**	**Totals**	**37,154**	**31,658**

47.—Exports of Wheat and Flour from the Principal Wheat-Exporting Countries and Imports of Wheat and Flour to the Principal Wheat-Importing Countries, crop years ended July 31, 1931 and 1932—concluded.

Wheat.	Twelve months, Aug. 1-July 31.	
	1930-31.	1931-32.
	000 bush.	000 bush.
Imports—		
Germany	31,342	35,009
Belgium	51,973	52,462
France	77,660	88,566
Great Britain and Northern Ireland	207,580	229,435
Irish Free State	10,725	10,615
Italy	83,524	37,599
Netherlands	27,612	28,028
Sweden	4,758	6,757
Switzerland	18,493	21,138
Czechoslovakia	11,798	21,998
Japan	20,708	22,751
Other countries	87,955	83,613
Totals	**634,128**	**637,971**

Flour.	Twelve months, Aug. 1-July 31.	
	1930-31.	1931-32.
	000 brl.	000 brl.
Imports—		
Germany	121	117
Austria	1,581	652
Denmark	802	658
Finland	1,097	814
Great Britain and Northern Ireland	6,539	5,726
Irish Free State	1,883	2,064
Norway	712	693
Netherlands	1,962	369
Czechoslovakia	1,241	603
Egypt	1,666	1,232
Other countries	2,173	1,804
Totals	**19,777**	**14,732**

World's Live Stock.—The Statistics of Table **48**, compiled from data published by the International Institute of Agriculture, show as nearly as possible, the world situation with regard to live stock about 1931. For many countries, the figures are the result of careful enumeration, while for others, they represent only quite approximate estimates.

48.—Numbers of Live Stock in Principal Countries, *circa* 1931.

Continent and Country.	Horses.	Cattle.	Sheep.	Swine.
Europe—				
Austria	247,727	2,312,549	272,228	1,965,367
Belgium	241,989[1]	1,767,536	185,373[11]	1,235,214
Bulgaria	482,180	1,817,437	8,739,803	1,002,089
Czechoslovakia	747,650	4,450,965[2]	531,125	2,575,921
Denmark	499,045[2]	3,208,275	190,984	5,453,480[2]
Finland	356,650	1,810,030	923,999	394,554
France	2,919,700	15,433,840	9,844,690	6,397,970
Germany	3,450,995	19,123,658	3,499,341	23,807,945
Great Britain and Northern Ireland	1,193,879	7,954,539	26,373,856	3,180,883
Greece	325,294	867,612	7,071,725	422,521
Hungary	864,571	1,807,429	1,440,409	2,714,635
Irish Free State	449,697	4,029,084	3,575,376	1,227,003
Italy	967,406	6,892,722	9,896,038	3,157,434
Latvia	366,300	1,116,900	923,100	712,100
Lithuania	597,050	1,297,376	1,212,454[3]	1,568,543
Netherlands	299,152[4]	2,366,066	484,987	2,017,781
Norway[2]	176,823	1,309,656	1,692,406	317,343
Poland	4,123,545[4]	9,786,389	2,598,621	7,320,898
Portugal	83,883	852,269	3,720,549	1,157,097
Roumania	1,988,126	4,079,467	12,356,015	3,221,472
Spain	562,877	3,653,667	20,046,532	5,102,165
Sweden	656,200	3,109,200	634,800	1,724,408
Switzerland	140,023	1,609,073	183,838	924,271
Union of Soviet Socialist Republics in Europe and Asia	30,236,800	49,900,000	79,500,000[3]	15,900,000
Yugoslavia[1]	1,168,768	3,871,556	8,425,634	3,133,164
Northern and Central America—				
Canada	3,128,996	7,991,000	3,608,000	4,716,720
Cuba	757,774	4,864,775	101,737	590,812
Dominican Republic	138,600	700,720	161,913	1,019,836
Mexico[5]	1,035,782	5,584,892	2,697,668	2,902,949
United States[1]	12,679,000	62,407,000	53,912,000	59,511,000

For footnotes see end of Table, p. 277.

48.—Numbers of Live Stock in Principal Countries, *circa* 1931—concluded.

Continent and Country.	Horses.	Cattle.	Sheep.	Swine.
South America—				
Argentina	9,858,111	32,211,855	44,413,221	3,768,738
Brazil	5,253,699	34,271,324	7,933,437	16,168,549
Chile	441,027	2,387,940	6,263,482	331,156
Colombia	929,100	7,343,300	809,550	1,434,300
Peru	432,108	1,805,853	11,209,235	688,696
Uruguay	613,299	7,127,912	20,558,124	307,924
Venezuela	167,708	2,278,000	113,439	512,086
Asia—				
British India	2,218,803[5]	159,763,471[5]	44,628,474[5]	–
Formosa	325	93,322[6]	341	1,750,464
Indo-China	98,384	1,764,237	7,267	2,361,114
Iraq	–	–	5,463,674	–
Japan	1,489,979	1,498,260	23,702	742,311
Java and Madura	250,187	3,755,672	1,291,677	98,211
Korea	55,544	1,611,585	1,561	1,386,891
Philippines	341,169[7]	1,145,921	124,844	2,454,286
Siam	303,451	4,773,551	–	864,247
Syria and Lebanon	52,602	418,361	2,969,478	4,707
Turkey in Europe and Asia	480,833	4,868,609	11,762,343	–
Africa—				
Algeria	166,827	872,238	4,670,735	83,207
Egypt[8]	35,714	792,123	1,239,111	18,404
French Morocco[9]	206,527	1,908,525	6,612,615	91,132
French Soudan	46,000	1,400,000	3,100,000	28,500
Kenya	2,403	5,192,824	3,227,772	15,230[10]
Madagascar	2,157	7,048,373	262,630	531,006
Nigeria	190,443	2,910,752	2,250,160	27,424
Southern Rhodesia	2,759	2,582,460	375,502	67,880
Territory of S.W. Africa	20,399	465,274	1,397,193	9,381
Tanganyika	87	5,099,438	2,233,287	3,300
Tunis	99,273	539,638	2,474,855	25,156
Union of South Africa	836,003	10,573,869	48,358,349	940,904
Oceania—				
Australia	1,792,734	11,719,084	110,568,279	1,071,679
New Zealand	295,743	4,080,525	29,792,516	476,194

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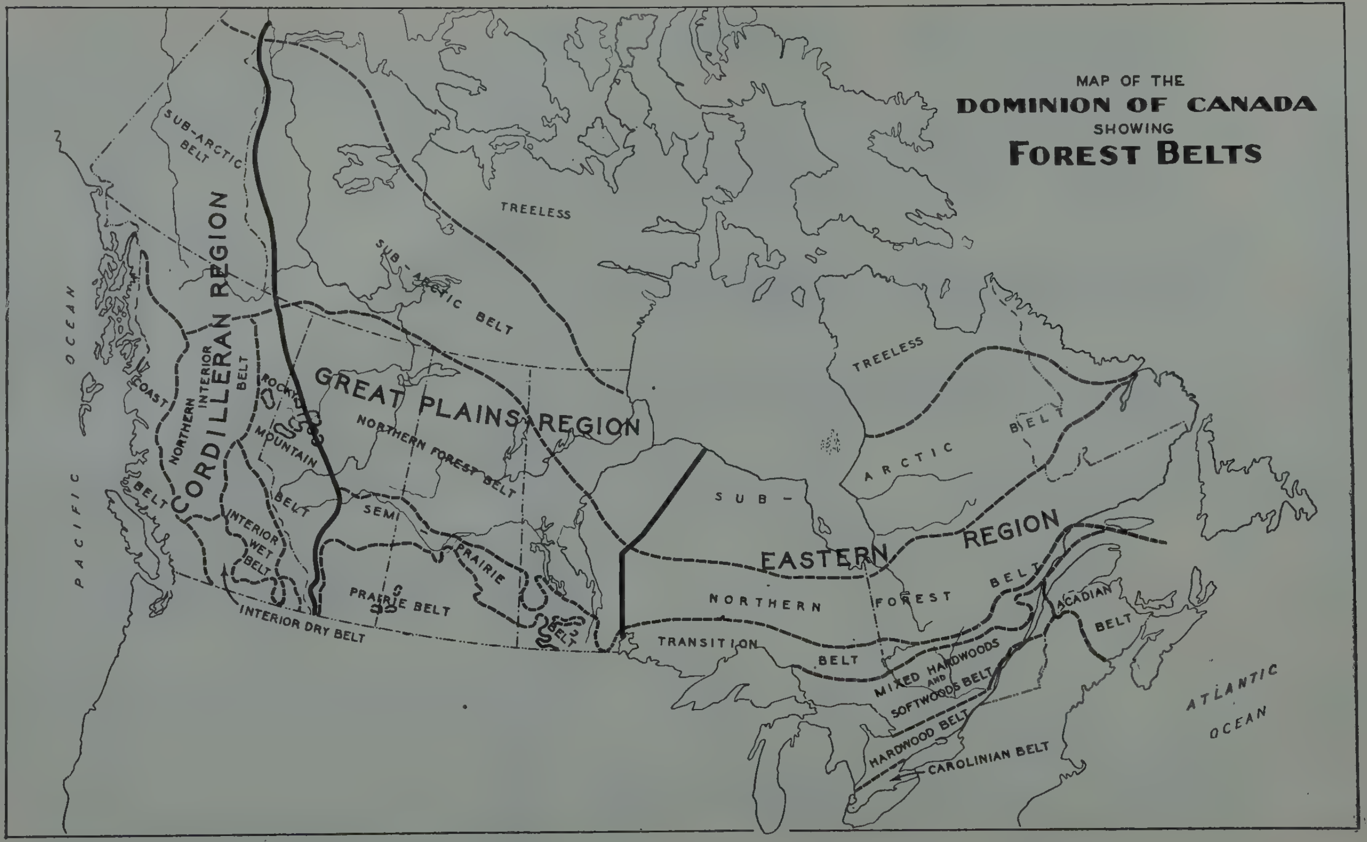
[1] On farms only. [2] In rural districts only [3] Sheep and goats. [4] Exclusive of animals belonging to the Army. [5] Incomplete data. [6] Foreign and cross-bred cattle and zebus. [7] Horses and mules. [8] Exclusive of animals belonging to the British Army. [9] Number registered for fiscal purposes. [10] Swine belonging to Europeans only. [11] 1910.


MAP OF THE
DOMINION OF CANADA
SHOWING
FOREST BELTS
TREELESS
SUB-ARCTIC BELT
TREELESS
ARCTIC
BELT
SUB-
EASTERN REGION
NORTHERN FOREST BELT
TRANSITION BELT
MIXED HARDWOODS AND SOFTWOODS BELT
HARDWOOD BELT
CAROLINIAN BELT
ACADIAN BELT
ATLANTIC OCEAN
GREAT PLAINS REGION
NORTHERN FOREST BELT
SEMI PRAIRIE BELT
PRAIRIE BELT
SUB-ARCTIC BELT
CORDILLERAN REGION
NORTHERN INTERIOR BELT
COAST BELT
ROCKY MOUNTAIN BELT
INTERIOR WET BELT
INTERIOR DRY BELT
PACIFIC OCEAN

FOREST BELTS OF CANADA

CHAPTER IX.—FORESTRY.[1]

Section 1.—Physiography, Geology and Climate as Affecting the Forests.

The Dominion of Canada may be roughly divided into three main drainage areas—the Pacific slope west of the Rocky mountains; the Great Plains region draining into the Arctic ocean and Hudson bay; and the basin of the Great Lakes and the St. Lawrence, together with the Maritime Provinces. Each of these three regions supports a distinct type of forest growth.

The Pacific Slope.—The Pacific slope is characterized by several systems of mountains running approximately parallel and extending from the southeast to the northwest. The Rocky mountains vary in elevation from 5,000 to 13,000 feet above sea-level, with numerous peaks extending well above 10,000 feet. Between this system and the Pacific are: the Columbian system, comprising the Selkirk, Monashee and Caribou mountains; the Interior Plateau system; the Cassiar and Yukon systems; the Pacific system comprising the Cascade, Coast and lesser ranges, terminating with the sunken Insular system whose upper elevations form Vancouver island, the Queen Charlotte group and other coast islands. The chief rivers follow the valleys between these ranges, breaking through in some cases along the shorter cross valleys from east to west.

The Rocky mountains are formed chiefly of Palæozoic rocks, as are also the islands off the coast. The Coast range is almost entirely granitic and the Selkirks are Precambrian or Cambrian. The intervening ranges are of mixed formations, varying from rocks of sedimentary origin to granites. The best soil in British Columbia is concentrated in valley bottoms or alluvial deltas, and the purely agricultural area has been estimated at about 10 p.c. of the land area.

The climate along the coast is mild and humid, with a mean annual temperature varying from 44° to 49° F. The precipitation is the heaviest in Canada, varying from 40 to 120 inches. The greater part of this precipitation falls during autumn and winter, only 30 p.c. falling during the growing season, to which fact is sometimes ascribed the scarcity of deciduous-leaved forest growth, which requires more moisture during the growing season. In any case, coniferous tree growth in this region is the most luxuriant in Canada, and the forests have the most rapid rate of growth, the largest individual trees and the heaviest stands of timber extending from sea-level up to elevations of 3,500 or 4,000 feet. The Interior Dry belt of British Columbia has a low annual precipitation, varying from 10 to 20 inches. Extremes of temperature from 100° F. to −45° F. make this a region unfavourable to tree growth. The winds from the Pacific, which precipitate most of their moisture on the Coast and Cascade mountains, cross this interior plateau, leaving its southern part in a semi-arid state, and give up a large part of what moisture remains when they reach the Selkirk and Rocky mountains, forming what may be termed the Interior Wet belt, centred in the Columbia valley. Here the precipitation averages over 30 and sometimes reaches 60 inches, taking the form of snow in higher altitudes. Temperatures vary from 100° F. to −17° F. In the Rocky Mountain range itself the climate is more extreme and variable than to the westward.

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[1] Material in this chapter has been prepared in co-operation with Roland D. Craig, F.E., of the Forest Service of the Department of the Interior, by R. G. Lewis, B.Sc.F., Chief of the Forest Products Branch of the Dominion Bureau of Statistics. This Branch collects and compiles statistics relating to forest production and publishes four annual printed reports covering the lumber industry, the pulp and paper industry and the wood-using and paper-using industries of Canada. These printed reports are usually preceded by a number of preliminary mimeographed reports, one for each important industry or group of industries. For detailed list of publications see Chaper XXIX.

The Great Plains.—East of the Rockies lies the Great Plains region, composed of a variety of topographical types. From the foothills of the Rockies, the country slopes gradually eastward and northward. The prairie country extends from the International Boundary to the 55th parallel along the foothills, gradually tapering down toward the east to a point near the lake of the Woods. Of this area, 105,000 square miles is now almost entirely treeless, with rich fertile soil, and is at present a purely agricultural or pastoral country. Whether its present treeless condition is due to climatic or other causes is problematical, but the presence of isolated patches of tree growth in situations well protected from fire, the ease with which these natural groves can be increased and new plantations established by artificial planting and protection from prairie fires, would seem to indicate that repeated burning accounts, at least in part, for its present treeless state. The underlying rocks are of the Cenozoic and Mesozoic eras. The climate of Alberta is extremely variable in winter, due to a warm, dry wind known as the *Chinook,* which blows from the south and southwest and extends its influence from the International Boundary to the Peace river and eastward to Regina in Saskatchewan. In summer the isotherms run almost due north and south in Alberta. Rainfall varies from 15 to 20 inches. The temperature in Manitoba has an absolute recorded range of 150° F., with a mean range of 71°. Saskatchewan and Alberta are more temperate, especially where they are affected by the *Chinook.* North of the treeless prairies is a region largely unexplored, covered at first by a comparatively light forest growth which toward the north and east gives way to the sub-Arctic "tundra"—a region of muskeg and bare, glacier-worn rocks of the Laurentian and Precambrian types.

These Laurentian rocks in Canada form the Archæan or Canadian Shield, with a distinct type of topography. This rock formation covers a huge irregular triangle with its apex near the Thousand islands in the St. Lawrence, from which point one arm extends northwesterly to the mouth of the Mackenzie river and the other northeasterly down the St. Lawrence valley to include the Labrador peninsula. This region has been reduced to a peneplainated condition by repeated glacial action which has worn down the high elevations and scoured out most of the soil except in isolated depressions. It is covered with innumerable lakes, muskeg or bog, and rivers. The southern portion of the Shield is to a great extent agricultural land, actual or potential, much of which is still heavily forested. Toward the north tree growth becomes lighter and the climate as a rule becomes too severe for continuous successful agriculture. Still farther toward the north, tree growth ceases and the region merges into the same belt of sub-Arctic "tundra" already mentioned.

The St. Lawrence Basin and the Atlantic Slope.—The basin of the St. Lawrence and Great Lakes contains a variety of topographical and geological types. The north shores of lake Superior and Georgian bay, the upper Ottawa River valley and the southern part of Labrador, are part of the Laurentian Shield already described. Here the climate is tempered in part by the presence of the lakes and the gulf of St. Lawrence but is, nevertheless, severe and variable. To the south, soil and climate improve, and the southwestern peninsula of Ontario, the north shore of lake Ontario and the St. Lawrence valley are all essentially agricultural land. The rock here is of sedimentary origin, mostly of Palæozoic age.

The Maritime Provinces, with a general slope towards the Atlantic, are varied in topography and geology. The climate resembles that of southern Ontario, being modified by the presence of the ocean. Precipitation is above 35 inches annually. This region supports a type of forest similar to that of the southern portion of the Archæan Shield.

Section 2.—Main Types of Forest Growth.

Physiographic, climatic and soil conditions in Canada favour the coniferous type of forest. While the more fertile portions of Ontario, Quebec and the Maritime Provinces support a heavy virgin growth of hardwoods, the greater part of Canada's forest area is covered with spruce, pine, balsam, Douglas fir and other coniferous softwoods. Three main groups of forest growth in Canada follow the main physiographic divisions already mentioned. These groups are the Cordilleran, the Great Plains and the Eastern forests.

The Cordilleran Forests.—The Cordilleran forest, which covers the greater part of the Pacific slope, may be subdivided into the Coast belt, the Interior Dry belt, the Interior Wet belt and the Rocky Mountain belt. The Coast belt includes several distinct forest types, their character being determined by variations in climatic and topographic conditions, among which altitude and precipitation have had the greatest effect on forest growth. In the southern portion of the belt Douglas fir and red cedar are the principal species at altitudes below 2,000 or 2,500 feet. With these are associated hemlock, white pine, amabilis and lowland fir. Toward the north and at higher altitudes, Douglas fir disappears and red cedar and hemlock are the important trees, with amabilis fir and yellow cypress as subsidiaries. In the Queen Charlotte islands and along the northern part of the coast Sitka spruce and western hemlock form a lowland type.

In the Interior Dry belt, western yellow or "bull" pine predominates at low altitudes bordering on the grass lands. Douglas fir gradually increases in importance until it predominates at elevations up to 3,500 and 4,500 feet. Western larch covers a limited area usually between the true yellow pine and Douglas fir types. At the northern latitudinal and upper altitudinal limits of the Douglas fir type, an Engelmann spruce type develops, which merges into a spruce-alpine fir type at still higher altitudes. Lodgepole pine has taken the place of Douglas fir, Engelmann spruce and, in some cases, yellow pine on burned-over areas and has become, to a considerable extent, established as a distinct type.

Forest types similar to those of the coast have developed in the Interior Wet belt. In the southern portion of this belt, red cedar predominates in the wetter situations, mixed with Douglas fir, Engelmann spruce, white pine, hemlock, western larch, alpine fir, lowland fir and cottonwood. On the benches and lower valley slopes, hemlock and cedar are the important species. Engelmann spruce replaces hemlock at higher elevations, cedar gradually disappears and the spruce-alpine fir type stretches up to timber line. To the north, Engelmann spruce and alpine fir are more prominent and the other species are gradually eliminated.

The Rocky Mountain belt includes portions of the Dry Belt types to the south and those of the Interior Wet belt further north. Otherwise the typical forest of the Rocky mountains is made up of Engelmann spruce and some white spruce, with an increasing proportion of alpine fir as the altitude increases. This type has suffered so severely from fire, especially on the dry eastern slopes, that lodgepole pine has established itself permanently in some cases and temporarily in others on burned-over areas.

In the sub-Arctic belt, comprising the Yukon plateau and that part of the Rocky Mountain system north of 58°, the general elevation is over 4,000 feet, the climate is severe, the growing season short and precipitation scant. As a result, tree growth is slow and confined to favourable sites in valleys. The timber is small and of poor quality. It is, however, of great local value in the mining industry and to trappers. The principal type is the spruce-alpine fir, with lodgepole pine on poorer sites, and poplar and willow on richer soils on burned-over areas.

Most of the commercially important species of the Cordilleran region are confined to British Columbia. The spruce-fir-lodgepole pine type of the northern interior extends across the Rockies into the foothills of Alberta. Certain species, such as Douglas fir, Engelmann spruce, alpine fir and lodgepole pine, are also found in western Alberta, but in few cases do they extend any great distance eastward.

The Forests of the Great Plains.—The Great Plains region may be divided into the Prairie, Northern Forest and Sub-Arctic belts. There are no great variations in altitude in the region, and latitude and soil conditions, especially drainage, determine the distribution of forest types. The Prairie belt in southern Alberta, Saskatchewan and Manitoba extends north from the International Boundary for 200 to 400 miles. Patches of tree growth in protected situations are made up chiefly of aspen poplar, with some white spruce and jack pine. North of this purely agricultural and pastoral area is the great Northern Forest belt, from 300 to 400 miles wide, which extends from Alaska to Labrador, covering the greater part of the Laurentian Shield as far as the limits of commercial tree growth. Originally, white spruce predominated over this entire belt and it still forms the most important type commercially, although it has suffered severely through forest fires. In the East, balsam fir is an important associate, and the spruce-balsam fir type makes up most of the pulpwood resources of Eastern Canada. The black spruce type, frequently associated with eastern larch (tamarack), occupies poorly-drained areas within this belt. Enormous areas have been burned over by forest fires. Aspen poplar has replaced the spruce and balsam on the best soil in these areas, and is now the most prevalent species, although it will eventually be replaced by conifers where natural reproduction is possible. Over vast areas, however, there is no immediate prospect of securing a return to coniferous forest by natural agencies. Jack pine has taken possession of the drier, lighter soils, in some cases permanently. Paper birch comes in with aspen poplar toward the east, and balsam poplar occurs in the moister situations. Jack pine, aspen and balsam poplar reach a higher development along the Peace river in northern Alberta than they do elsewhere in America. Along its northern margin this belt merges into the sub-Arctic "tundra", with tree growth confined to narrow strips along waterways. Vigorous tree growth and fairly large timber are found along these shallow valleys as far north as 67°, indicating that soil conditions, especially drainage, are more important than climate in defining the limits of tree growth. To the northward, balsam fir disappears early from the forest growth, followed by balsam poplar, jack pine, aspen and paper birch, leaving white spruce, black spruce, tamarack or larch, and willow to define the northern limit of tree growth. This may be roughly indicated by a line drawn from the mouth of the Mackenzie river on the Arctic ocean to the mouth of the Churchill river on Hudson bay and across the Labrador peninsula at about 58° N. latitude.

The Eastern Forests.—In southeastern Canada a number of belts of forest growth with distinctive characteristics are recognized. The hardwood belts include the Carolinian zone, confined to the north shore of lake Erie and the western part of lake Ontario. This is important only as forming the northern fringe of a type which covers a large area in the central Eastern United States, and includes a number of species such as tulip, sassafras, etc., not found elsewhere in Canada.

North of this zone, still in the purely agricultural and pastoral area, the original forests were of the commercially important hardwoods, such as maple, elm, basswood, oak, yellow birch, hickory and beech, with patches of pine, hemlock and other conifers on the lighter soils. This area has been largely cleared and devoted to agriculture, and the original forest type is to be seen only on farmers' woodlots.

Since the beginning of the lumbering industry in Canada, the region north of this belt, extending, roughly speaking, to the height of land between the St. Lawrence and Hudson Bay waters, has been the centre of the most extensive exploitation, and still occupies that position as far as Eastern Canada is concerned. The forest types which still exist in this region vary considerably owing to soil and other conditions, but generally speaking white pine occupies the better situations on the lighter soils, and reaches its highest development in this belt. With it is frequently associated the red or Norway pine. On heavier soils, spruce, hemlock and the tolerant hardwoods also form an important part of the stand. Cedar, tamarack and black spruce form typical stands in poorly drained situations. Hardwood ridges, carrying chiefly maple and yellow birch, occur in the southern part of this belt. These, with hemlock, extend north to a line running approximately from the northeast corner of lake Superior to the mouth of the Saguenay river. The extensive lumbering operations of the past century, together with repeated forest fires, have greatly modified these original types. The exclusive cutting of white and red pine, practised until recently, has resulted in the displacement of these species by spruce, balsam fir, jack pine and the hardwoods, the spruce-balsam fir pulpwood areas being the most valuable type remaining. Jack pine has come in extensively on burned-over areas on lighter soils and in some cases has taken permanent possession of such sites. On account of its value for railway ties and pulpwood and the ease with which it can be grown it is not at all an undesirable species to perpetuate. Aspen and paper birch are also rapidly becoming established as temporary types. Along its northern border, this mixed hardwood and softwood type merges into the northern forest belt already described, with the disappearance of first the hemlock and the tolerant hardwoods and then the white and red pines.

The Acadian belt covers the Maritime Provinces and the south shore of the St. Lawrence in Quebec. The forest is similar to that of the New England States, being characterized by red spruce. With this are found varying proportions of white spruce and balsam fir. In the mixed softwood and hardwood type, which also occurs in this belt, white pine and hemlock occur, with yellow birch, maple and beech representing the commercial hardwoods. Cedar is fairly abundant in the western portion of this region. Burned-over areas in the Acadian belt are chiefly occupied by aspen and white birch as temporary species.

Section 3.—Important Tree Species.

In Canada there are approximately 130 species or distinct varieties of trees. Only 33 of these are conifers commonly known as "softwoods", but they comprise over 80 p.c. of the standing timber and 70 p.c. of the wood utilized for all purposes. While the number of deciduous-leaved or "hardwood" species is large, only about a dozen are of a commercial importance comparable with twice the number of conifers. The principal use for the hardwoods is for fuel, though increasing amounts are being manufactured into lumber, railway ties and veneers. A detailed description of the more important species of Canadian forest trees was given on pp. 282-285 of the 1924 Year Book.

Section 4.—Forest Resources.

Areas.—The total land area of Canada, revised according to the Labrador Boundary Award of 1927 and the latest surveys, is estimated at 3,457,484 square miles, of which 550,000 square miles is considered as being suitable for agricultural or pastoral purposes. According to the 1931 census about 255,094 square miles of this agricultural land was occupied and about 133,220 square miles was improved.

The total area covered by existing forests has been estimated at 1,153,000 square miles, including 26,652 square miles of occupied agricultural land still forested. Most of this will no doubt be left under forest cover in the form of farmers' woodlots. There is also a considerable area of forest land which is of agricultural value and will eventually be cleared but it is estimated that 1,100,000 square miles is essentially forest land which can best be utilised for forest production. (See Table **8**, p. 42.)

The accessible and productive forest area is estimated to be 791,670 square miles of which 378,945 square miles carries timber of merchantable size and on 412,725 square miles there is young growth which if protected from fire will eventally produce merchantable timber. The remaining area of 361,330 square miles carries forests of value either because of their influence on water control, climatic conditions, game conservation, or by reason of their attraction to tourists and their value as a source of wood for local use. On account of their geographical location or because of unfavourable growth conditions these forests at present are considered as non-productive from a commercial viewpoint.

As a result of the constant and inevitable improvement in conditions affecting profitable exploitation, such as the extension of settlement and transportation facilities, the increasing world scarcity of forest products, and the ever increasing demand for these products, due to the development of industry, the discovery of new uses for wood, and the improvements in the methods, equipment and machinery used in logging and manufacturing forest products, most of this inaccessible timber will eventually become commercially exploitable. It is estimated that of the accessible forest area 481,790 square miles is producing softwood or coniferous timber, 213,590 square miles, mixed softwoods and hardwoods and 96,290 square miles, hardwood or broad-leaved species.

In Canada as a whole about 8·4 p.c. of the total forest area has been permanently dedicated to forest production. Previous to the transfer of the natural resources to the western provinces in 1930, some 33,023 square miles of this reserved area comprised national forests but these have now in large part become provincial forests. The distribution of provincial forests, provincial parks and national parks among the various provinces is shown in the following statement.

FOREST RESERVES AND PARKS IN CANADA, 1933.

Province.	Provincial Forest Reserves.	Provincial Parks.	National Parks.
	sq. miles.	sq. miles.	sq. miles.
Nova Scotia	–	–	0·05
New Brunswick	–	–	0·10
Quebec	28,960	7,288	–
Ontario	19,607	4,889	15·00
Manitoba	3,808	–	1,148·00
Saskatchewan	9,217	177	1,869·00
Alberta	19,433	3	24,616·00
British Columbia	15,964	2,221	1,715·00
Totals	96,989	14,578	29,363·15

Of the total forest area 9·6 p.c. has been permanently alienated, being owned in fee simple by private individuals or corporations. The Crown still holds title to 13·2 p.c. of the area but has alienated the right to cut timber thereon under lease or licence. So far 77·2 p.c. has not been alienated in any way. It may be said that 90·4 p.c. of Canada's forest area is still owned by the Crown in the right either of the Dominion or the provinces and, subject only to certain temporary privileges granted to limit-holders, may at any time be placed under forest management and dedicated to forest production.

Volume of Standing Timber.—In 1932 the total stand of timber in Canada was estimated to be approximately 267,733 million cubic feet, of which 217,776 million cubic feet was of coniferous species and 49,957 million cubic feet of broad-leaved species.

During the years 1926-30 the average annual depletion due to use was approximately 2,000 million cubic feet of conifers and 970 million cubic feet of hardwoods. The average annual loss from fire is estimated at 185 million cubic feet of conifers and 45 million cubic feet of hardwoods. Though no widespread epidemics of insects or fungous diseases have occurred in recent years, local infestations which cause considerable loss develop practically every year. In Nova Scotia in 1931, the balsam suffered severely from "gout" induced, it is believed, by minute sucking insects of the genus *Dreyfusia*, previously undescribed. In the Gaspé peninsula the spruce saw-fly became a serious menace. In the absence as yet of any basic data on which to estimate the annual depletion from these causes, it may be taken as 700 million cubic feet. The total annual depletion during the five-year period is therefore estimated to have been about 3,900 million cubic feet. To what extent this loss has been replaced by growth increment is not known but, considering the preponderance of the younger age classes in the reproduction, it is believed there has been a considerable net depletion in the merchantable age classes.

Another real difficulty is the division of the existing stand into merchantable timber and that which is inaccessible or unprofitable, since merchantability depends not only on the location but on the density of the stand, the demands of the market for certain species or qualities of product, and the regulations as to cutting. Light stands covering large areas may in the aggregate carry very large amounts of timber and still not be exploitable at a profit. For some species, such as aspen and white birch, which comprise three-quarters of the hardwoods, there is very little demand, and therefore these cannot properly be classed as merchantable, though accessible as far as location is concerned.

In June, 1929, a conference of the Dominion and provincial forest authorities was held in Ottawa and it was decided to undertake a national inventory of the forest resources of Canada, each authority conducting the necessary stock-taking surveys on the land under its jurisdiction. In connection with the inventory definite data are being secured regarding the depletion due to use, fire, insect damage, etc., and the increment accruing. Five years was set as an objective for the completion of an inventory of at least the more accessible parts of the area. This national inventory is being organized under the direction of the Department of the Interior and related studies of increment and decrement should shortly begin to throw new light on many problems.

Under present conditions it is doubtful whether more than 135,000 million cubic feet of conifers and 30,000 million cubic feet of hardwoods can be considered as accessible.

1.—Estimate of Total Accessible Stand of Timber in Canada, by Regions and Classes, with Estimate of Grand Total Stand, 1932.

Region.	Conifers.			Broad-leaved.			Totals.		
	Saw Material.	Small Material.	Total Equivalent in Standing Timber.	Saw Material.	Small Material.	Total Equivalent in Standing Timber.	Saw Material.	Small Material.	Total Equivalent in Standing Timber.
	million feet b.m.	1,000 cords.	million cubic feet.	million feet b.m.	1,000 cords.	million cubic feet.	million feet b.m.	1,000 cords.	million cubic feet.
Eastern Provinces....	90,315	560,560	85,364,505	24,515	167,410	21,272,735	114,830	727,970	106,637,240
Prairie Provinces....	12,480	62,615	10,059,075	7,810	76,820	9,008,290	20,290	139,435	19,067,365
British Columbia....	154,610	52,000	39,943,590	500	930	197,850	155,110	52,930	40,141,440
Totals, Accessible Stand	**257,405**	**675,175**	**135,367,170**	**32,825**	**245,160**	**30,478,875**	**290,230**	**920,335**	**165,846,045**
Totals, Inaccessible Stand..............	146,119	430,842	82,408,575	11,906	177,590	19,478,464	158,025	608,432	101,887,039
Grand Totals...	**403,524**	**1,106,017**	**217,775,745**	**44,731**	**422,750**	**49,957,339**	**448,255**	**1,528,767**	**267,733,084**

Section 5.—Forest Administration.

Subsection 1.—Adminstration of Dominion and Provincial Timber Lands.

In Canada the general policy of both the Dominion Government and the Provincial Governments has been to dispose of the timber by means of licences to cut, rather than to sell timber land outright. Under this system the State retains the ownership of the land and control of the cutting operations. Revenue is derived in the form of stumpage bonuses (either in lump sums or in payments made as the timber is cut), annual ground rent, and royalty dues collected as and when the wood is removed. Both ground rent and royalty dues may be adjusted at the discretion of the Governments so that the public may share in any increase in stumpage values or, as has happened, reductions may be made in the rates if conditions demand them.

The Maritime Provinces did not adopt this policy to the same extent as did the rest of Canada. In Prince Edward Island all the forest land has been alienated and is in small holdings, chiefly farmers' woodlots. In Nova Scotia 76 p.c. of the forest land is privately owned; nearly half of this is in holdings exceeding 1,000 acres. In New Brunswick nearly 50 p.c. has been sold, and 20 p.c. is in holdings exceeding 1,000 acres. The percentage of privately-owned forest land in the other provinces is as follows: Quebec, 7 p.c.; Ontario, 3·3 p.c.; Manitoba, 11·3 p.c.; Saskatchewan, 10·4 p.c.; Alberta, 15·7 p.c. and British Columbia, 13 p.c.

Until 1930 the Dominion Government administered the Crown lands, including timber lands, in the provinces of Manitoba, Saskatchewan and Alberta, in the Railway Belt and Peace River Block of British Columbia, and in Yukon and the Northwest Territories, but the forests as well as the other natural resources in the western provinces have now been transferred to provincial control. In all cases timber lands are now administered by the provinces in which they lie. As new regions are explored their lands are examined and the agricultural land disposed of. Absolute forest land is usually set aside for timber production, and the policy of disposing of the title to lands fit only for the production of timber has been virtually abandoned in every province in Canada. The ownership of forests by towns and communities, so common in Europe, is now beginning in Canada. Efforts are being made, especially in Quebec and Ontario, to encourage the establishment and maintenance of forests on this basis.

Timber Lands Under Dominion Control.—The National Parks of Canada Branch of the Department of the Interior administers the Dominion parks, now embracing about 29,360 square miles. These are primarily national playgrounds and game preserves, the timber being practically withdrawn from commercial use. The Dominion Lands Administration of the Department of the Interior administers and protects forest land lying north of the provincial areas. The Department of Indian Affairs administers, in trust for the Indians, all timbered areas within their reservations. The Board of Railway Commissioners has charge of fire protection along practically all the railway lines in Canada.

Forest Administration in the Prairie Provinces.—Upon the transfer of the natural resources in 1930, each province took steps toward the creation of an adequate forest service with a Provincial Forester in charge. In Manitoba the service is under the Department of Mines and Natural Resources and in its forest regulations, framed under the Manitoba Forest Act, the former Dominion Forest Reserves and Crown Timber Regulations are very largely incorporated. In Saskatchewan and Alberta a closely similar policy is being followed. In every case the central object of policy is to safeguard the regeneration of valuable species in the natural forest types. The national forests in these provinces have practically all been retained as provincial forests and some additional reserves have been established, making a total area of 32,458 square miles. Approximately 27,335 square miles of forest lands in the Prairie Provinces are privately owned.

British Columbia.—In the province of British Columbia, the Forest Branch of the Department of Lands has administered timber lands since 1912. All unalienated lands in the province which are found to be better suited to forest than to agricultural production are dedicated to forest production, and all timber lands carrying over a specified quantity of timber are withdrawn from disposal until examined by the Forest Branch. During the last few years 15,964 square miles have been set aside permanently for forest purposes. The present practice is to sell cutting rights for a stated period by public competition but licences to cut, which are renewable annually in perpetuity, have been granted for a large proportion of the accessible timber. The royalties are adjusted periodically on the basis of prevailing industrial conditions. About 18,150 square miles of timber land are privately owned.

Ontario.—Forest administration is carried out in Ontario under the Department of Lands and Forests, which is subdivided into two divisions each under a Deputy Minister. The Lands and Forests Division controls timber sales and the Forestry Division has charge of reforestation, protection, air service, forest surveys and investigations. The Forestry Board, consisting of representatives of forest industries, the University of Toronto Faculty of Forestry and the Deputy Minister of Forestry, acts in an advisory capacity.

In recent years the sale of saw timber has been by tender after examination, with conditions covering the removal within a specified period, disposal of *débris*, etc. Much of the merchantable timber is at present held under licences granted in the past and renewable indefinitely. Pulpwood areas are usually disposed of by individual agreements for longer periods than in the case of saw timber. Manufacture in Canada was made a condition in the disposal of all softwood saw timber in 1897, of all pulpwood in 1900 and of all hardwood in 1924. In some individual pulpwood agreements the licensee must undertake not only to erect a pulp-mill but also a paper-mill within the province, the type of mill being stipulated in the agreement. In this province about 7,972 square miles of forest land have been disposed of outright. Provincial forest reserves cover 19,607 square miles.

Quebec.—The Forest Service of the Department of Lands and Forests administers the timber lands in Quebec. Its powers include classification of land, disposal of timber and regulation of cutting operations. Forest protection has been since 1924 under a separate organization, the Forest Protective Service. Licences are granted after public competition and are renewable from year to year, subject to changes in royalty by the Government at any time. Grants of land in fee simple, made in some cases under the French *régime* in Quebec, are responsible for the private ownership of about 34,173 square miles of forest land. An area of 28,960 square miles has been reserved for forestry purposes.

New Brunswick.—The Forest Service, under the Department of Lands and Mines, and a special Forestry Advisory Commission are the forest authority in New Brunswick. The Forestry Advisory Commission, consisting of the Minister of Lands and Mines, the Deputy Minister, the Chief Forester, a lumberman representing the licensees of Crown lands, and one representing the private timberland owners is appointed to advise on matters of policy. At present timber lands are disposed of as in the other provinces, but in the past several grants of forest land were made to railway companies, private concerns and individuals, who now own in fee simple about 10,675 square miles of forest land.

Nova Scotia.—In Nova Scotia the greater part of the forest land, amounting to 12,000 square miles, has passed into private ownership, but the system of disposal of timber by licences to cut is now being followed. What remains vested in the Crown is administered by the Chief Forester under the Minister of Lands and Forests. Under the Minister, the Chief Forester has charge of forest protection, surveying and scaling throughout the province.

Subsection 2.—Forest Fire Protection.

The protection of forests from fire is undoubtedly the most urgent and most important part of the work of the different agencies administering forest lands in Canada. Except for the forests of the National Parks and the Northwest Territories and Yukon, which remain under Dominion control, the administration of forest lands is now the function of the individual provinces. Up to the end of the fire season of 1930, the Forest Service of the Department of the Interior was responsible for fire protection in the Prairie Provinces of Manitoba, Saskatchewan, and Alberta, and the Railway Belt of British Columbia. However, by reason of the transfer of natural resources from Dominion to provincial control, their administration is now a matter of provincial concern.

Each of the Provincial Governments, except that of Prince Edward Island, maintains a fire protection organization co-operating with owners and licensees for the protection of all timbered areas, the cost being in part distributed or covered by special taxes on timber lands. In each province, with the exception just mentioned, provincial legislation regulates the use of fire for clearing and other legitimate purposes, and provides for closed seasons during dangerous periods. An interesting development in this connection in the province of Quebec is the organization of a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs which co-operate with those of the Board of Railway Commissioners and the Provincial Government. The latter contributes money grants and also pays for the protection of vacant Crown lands lying within the area of the associations' activities.

In the matter of forest fire protection along railway lines, the provincial services are assisted by the Dominion Railway Act administered by the Board of Railway Commissioners. This Act gives to that body wide powers relating to fire protection along railway lines under its jurisdiction in Canada. Certain officers of the various forest authorities are appointed *ex officio* officers of the Board of Railway Commissioners. These officers co-operate with the railway fire-ranging staffs employed by the various railway companies, the compulsory control of all lines coming under the jurisdiction of the Board being one of the requirements of the Dominion Railway Act.

The most important single development of late years in forest fire protection has been the use of aircraft for the detection and suppression of incipient forest fires. Where lakes are numerous flying boats can be used for detection and for the transportation of fire fighters and their equipment to fires in remote areas. Where safe landing places are few and no other lookout system has been developed, as in northern Alberta, land machines are used for the detection and inspection of fire only; but in the Laurentian area, where lakes are numerous, flying boats are used both for observation and control. Specially developed aircraft equipped with wireless are employed on forest fire-protection operations; these enable the observer to report the location of the fire as soon as it has been detected. Aircraft are now being used extensively for exploring remote areas and mapping forest lands by means of aerial photography. Waste lands and the various forest types can be mapped more accurately and more economically by this means than by ground surveys. As a general rule aircraft are used in the more remote districts, while lookout towers, connected by telephone lines or equipped with wireless, are established in the more settled and more travelled forest areas. While these agencies have to a large extent supplanted the old canoe, horseback and foot patrol for detection of fires, a large ground staff with its equipment stored at strategic points will always be necessary for the fighting of larger fires and the maintenance of systems of communication and transportation, and of fire lanes and fire guards in the forest.

The most important improvement in forest fire-fighting equipment has been the portable gasolene pump. These pumps, which each weigh from 45 to a little over 100 pounds, can be carried to a fire by car, canoe, motor boat, automobile, aircraft, pack saddle or back pack. They can deliver efficient water pressure as far as seven thousand feet from a water supply and, when used in relays, at a much greater distance. Smaller hand pumps are also used effectively in many cases.

In addition to these improved measures, the enactment of legislation has tended to reduce the fire menace. The establishment of close seasons for brush burning, and seasons during which permits are required for setting out fires and for travel in the forest during dangerous dry periods, have been of enormous value as preventive measures.

Since its beginning in 1900, the Canadian Forestry Association has played an important part in securing popular co-operation in reducing the fire hazard. By means of its attractive magazine, which has a circulation of over 16,000, railway lecture cars and motor trucks provided with motion picture equipment, and by co-operation with radio broadcasting stations and the press, the Association reaches a large proportion of the population of the Dominion. Special efforts are made through the schools, by specially appointed junior forest wardens and other means to educate the younger generation as to the value of the forests, the devastation caused by fire and the means of preventing such destruction.

Prepared lectures illustrated by slides and films are distributed to volunteer lecturers and other educational work is carried on in schools and at public meetings. The different Dominion and provincial forest authorities also carry on extensive publicity work independently and in co-operation with the Canadian Forestry Association.

Another interesting development in forest protection has been the establishment of special meteorological stations for the study of the effects of weather conditions on the fire hazard, and the broadcasting of special forecasts of hazardous fire weather.

Subsection 3.—Scientific Forestry.

Up to the present the practice of forestry in Canada has consisted chiefly in the administration and protection of existing forest areas. About 35 square miles is now being planted out annually, largely in connection with farmers' woodlots, shelter belts, and reclamation work, while several commercial reforestation projects are being carried on by paper companies and by the Ontario Government on denuded Crown lands. The great forestry problem in Canada, however, is the management of Crown forests, first under provisional and later more intensive working plans, so as to ensure a sustained yield. To this end, forest research activities are now assuming great importance. Silvicultural investigations are receiving marked attention both from the Dominion services and some of the provincial services.

About 200 technical foresters find employment either under the Dominion and provincial forest services or with paper and lumber companies. In addition to administrative work, these men carry on forest surveys either for the estimation of timber stands and making of maps, or to determine natural growth and reproduction conditions and factors. They also direct any planting or nursery work and direct the regulation of commercial logging operations along forestry lines.

The Research Division of the Dominion Forest Service has established permanent forest experiment stations at Petawawa, Ontario, and at Lake Edward, near Grand'Mère, in Quebec, and carries on similar experimental work at other points throughout Canada. A considerable amount of this work is done in co-operation with provincial forest services and with pulp and lumber companies.

The Forest Service of the Department of the Interior is now conducting a National Forest Inventory in co-operation with the various Provincial Governments (see p. 285). It is expected that, in so far as the commercially accessible timber is concerned, this inventory will be completed by 1935. An important feature is that the Forest Service is conducting special rate-of-growth surveys in each province to determine the nature and extent of the natural reproduction and the annual increment now being secured under varying conditions of site and type, following cutting or forest fires. The valuable silvical data thus obtained will provide a sound basis for future forest policies.

Another important phase of forest research is found in the work of the Dominion Forest Products Laboratories in determining the best methods of forest utilization, that is, the converting of standing timber into saleable commodities with a minimum of waste. These Laboratories, established by the Dominion Forest Service at Ottawa and in connection with the University of British Columbia at Vancouver, carry on investigatory work in forest products, covering the strength, durability and other mechanical, physical and chemical qualities of Canadian woods, methods of seasoning, preservation from decay, and chemical utilization in wood distillation and other industries. A special pulp and paper division of the laboratories is located in Montreal, the recognized business centre of the industry, in the Cellulose Institute of the Canadian Pulp and Paper Association. The division is in close co-operation in this connection with the Association and with McGill University. Much credit is due to the forestry departments of some of the pulp companies for pioneering work in forest research.

Education in forestry and allied subjects and opportunities for research are offered by four Canadian universities and by other agencies. The University of Toronto, the University of New Brunswick and the University of British Columbia, provide four-year courses leading to a professional degree. The School of Forestry and Surveying in connection with Laval University at Quebec provides, in the French language, a combined course of four years' duration leading to diplomas in both sciences. The Government of Quebec has established a school in paper-making at Three Rivers in the heart of the paper industry; several agricultural colleges provide short courses in farm forestry and a school for forest rangers has been established at Berthierville by the Quebec Forest Service.

The practice of forestry by individuals and private concerns is encouraged by the furnishing of expert advice by Dominion and provincial services and by the distribution of tree-planting material. The Dominion Department of Agriculture maintains two nurseries in Saskatchewan, one at Indian Head and the other at Sutherland near Saskatoon. Over 7,000,000 trees are distributed annually to farmers and ranchers in the Prairie Provinces for planting woodlots and wind-breaks. If certain conditions are fulfilled, the material and instructions are provided free except for transportation charges. A total of over 120,000,000 trees has been distributed.

The province of Ontario provides material under similar conditions and distributes to woodlot owners at least 7,000,000 trees annually from its five nurseries. As many more are being provided for the creation of county forests, demonstration forests and plantations on denuded Crown lands. To encourage the establishment of communal forests by towns and other municipalities, the Provincial Government undertakes to plant free of charge any area purchased by the municipality for this purpose. The Government also assists counties that purchase areas of not less than 1,000 acres of land for forest purposes. As a result of these inducements there are at present scattered throughout the province 50 communal forests owned by municipalities and eight of the larger county forests. Farm land used for forestry purposes, while so used, is exempt from taxation up to 10 p.c. of the total farm area but not exceeding a total of 20 acres.

In Quebec, a forest nursery at Berthierville serves as a demonstration station for the School of Forestry and as a location for the forest ranger school. It provides trees for sale and distribution in the province, comprising seedlings and transplants for forest planting and larger trees for ornamental purposes. The capacity of the nursery is about 10,000,000 trees. Provision is made by legislation for the creation of communal forests and there are now 76 of these, covering 594,059 acres.

Section 6.—Forest Utilization.[1]

Historical.—The forest has always played a large part in the life of the pioneer in Eastern Canada, providing him with building material and fuel but opposing his agricultural efforts. The material removed in clearing the first fields was usually more than sufficient for his needs, and in many cases what would now be considered valuable timber was burned by the early settler. Local trade in lumber began in New France shortly after 1650. The first attempts at forest conservation took the form of setting aside areas of timber for the use of the navy, and the first exports were of shipbuilding material and spars. Sawmills were established along the St. Lawrence before the close of the seventeenth century. While there was no recorded transatlantic trade in forest products other than naval supplies, shipments of lumber and staves were made to the French West Indies during the French *régime*. Shipbuilding became an important local industry and gave rise to considerable forest exploitation.

Transatlantic trade began to develop after the Conquest, stimulated by bounties and tariff privileges granted with the object of reducing England's dependence on Baltic supplies, especially in connection with naval material. This trade, however, did not develop satisfactorily until the beginning of the nineteenth century, when Napoleon succeeded in interfering seriously with British imports of wood from the Baltic. The export of timber from Canada increased enormously, and the square timber trade in white pine and oak spread from the St. Lawrence and Richelieu valleys to lake Champlain and Upper Canada, especially the Ottawa valley. This trade reached its height in the '60's and has steadily declined since that time.

Sawmilling on a large scale followed the square timber trade and the establishment of small custom mills followed in the wake of the settler. The building of wooden ships in the St. Lawrence valley and the Maritime Provinces developed hand in hand with the lumber industry, providing a local demand for timber and a means of exporting it overseas. The British preferences were reduced and finally abolished about 1860.

The export trade in sawn lumber to the United States developed from 1820 to 1830 and gradually replaced the more wasteful overseas square timber trade, but it was not until after Confederation that the export of sawn lumber by sea exceeded that of square timber.

Encouraged by the free entry of raw materials into the United States, an important trade developed, especially in Ontario, in the exportation of saw logs to be sawn into lumber in United States mills. The Provincial Government prohibited the exportation of this material, when cut on Crown lands, about 1900 and effectively checked this economic loss. Similar legislation has since been passed by the Dominion and the other Provincial Governments and has been extended to pulp-wood and other raw or unmanufactured forest products.

The lumber industry which began in Quebec and New Brunswick and extended into Upper Canada has since moved gradually through "Old" Ontario, along the Upper Ottawa and its tributaries, around Georgian bay into "New" or northern Ontario and through the Lake of the Woods and Rainy River districts. It is still an important industry in these regions. Lumbering to the north of the prairies, where the timber was never particularly large nor abundant, has progressed with the settlement of the district but the production does not usually exceed the local demand. In 1908 British Columbia provided less than a fifth of Canada's lumber production but in 1931 this proportion had increased to 54 p.c., showing the rapid westward movement of the centre of production. British Columbia has added several new tree species to the lumber market and at present possesses the heaviest stands and the largest individual trees in Canada.

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[1] An article on "The History of the Canadian Lumber Trade", by A. R. M. Lower, M.A., appears at pp. 318-323 of the 1925 edition of the Canada Year Book.

Remarkable developments in the manufacture of pulp and paper in the twentieth century have led to a remarkable increase of forest exploitation in Eastern Canada, giving rise to an industry which has already surpassed the manufacture of lumber and is to-day the most important manufacturing industry in Canada and the source of the greatest single item in our exports next to wheat.

Subsection 1.—Woods Operations.

Differences in forest conditions throughout Canada give rise to differences in logging methods. Generally speaking, throughout Eastern Canada the climate is such that the cutting and hauling of logs can be carried on most economically during the fall and winter months. The trees are felled and the logs hauled to the nearest stream or lake, where they are piled on the ice or sloping banks. The presence of connected systems of lakes and streams makes it possible in most cases to float the logs from the forest to the mill at a minimum cost during the annual spring freshets. The logging industry east of the Rocky mountains is therefore almost entirely seasonal. In many cases lumbermen co-operate in river-driving operations and improvement companies, financed by the logging operators, build river improvements to facilitate the passage of the floating logs, the logs being finally sorted and delivered to their respective owners. In British Columbia the scarcity of drivable streams and the greater average size of the logs give rise to entirely different logging methods. Logs are assembled by cable systems operated by donkey engines and are transported to the mills or to water chiefly by logging railways and in some cases by motor trucks. These operations are more or less independent of frost, snow or freshet and are carried on in most cases throughout the entire year.

In Eastern Canada logging operations are usually carried on by the mill owners or licensees of timbered lands, often through the medium of contractors, sub-contractors and jobbers. In the better settled parts of the country a considerable quantity of lumber is sawn by custom sawmills or small mills purchasing logs from the farmers. Unmanufactured pulpwood, poles, ties and other forest products have a market value, but saw-logs, being as a rule the property of the mill-owner, are not generally marketed as such in Eastern Canada. In British Columbia logging is carried on more frequently as a separate enterprise by limit-holders, who cut and sell logs on the market. In many cases mill operators are not limit-holders but buy their entire supply of raw material from logging concerns.

In connection with operations in the woods it should be borne in mind that the forests not only provide the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior and other plants but that they also provide logs, pulpwood and bolts for export in the unmanufactured state, and fuel, poles, railway ties, posts and fence rails, mining timber, piling and other primary products, which are finished in the woods ready for use or exportation. There are also a number of minor forest products, such as maple sugar and syrup, balsam gum, resin, cascara, moss and tanbark, which all go to swell the total.

Table **2** gives the total value of the products of woods operations in Canada for the years 1926 to 1930 inclusive. The imports and exports of forest products in the fiscal years ended Mar. 31, 1929-32, are shown in Tables **12** and **13** of the chapter on External Trade.

2.—Value of of Woods Operations, by Products, 1926-30.[1]

Product.	1926.	1927.	1928.	1929.	1930.
	$	$	$	$	$
Logs and bolts	75,791,932	74,270,067	76,431,481	79,278,543	75,563,041
Pulpwood	68,100,303	70,284,895	74,848,077	76,120,063	67,529,612
Firewood	40,032,804	40,582,774	41,164,270	41,764,507	43,786,064
Hewn railway ties	6,792,087	6,242,865	5,871,724	5,730,423	5,038,899
Square timber	2,643,543	2,865,906	3,772,137	4,179,077	2,945.748
Poles	3,828,193	3,948,723	4,934,371	6,677,559	6,733,259
Round mining timber	1,566,938	965,185	998,146	1,028,126	885,343
Fence posts	1,318,291	1,281,633	1,506,050	1,674,489	1,585,985
Wood for distillation	462,818	482,277	476,726	455,957	335,330
Fence rails	440,097	431,057	463,469	477,569	624,968
Miscellaneous products	3,459,322	3,584,368	2,484,348	2,183,816	1,825,245
Totals	**204,436,328**	**204,939,750**	**212,950,799**	**219,570,129**	**206,853,494**

[1] The value of woods operations for 1931, made available at the time of going to press, is $141,123,930.

It has been estimated that operations in the woods in Canada in 1930 involved the investment of $246,000,000 in logging equipment, gave employment for a part of the year to 90,000 men and distributed over $67,000,000 in wages and salaries. In estimating the annual drain on our forest resources, certain converting factors have been used. Each of these factors represents in cubic feet the quantity of standing timber that must be cut in the forest to produce one unit of the material in question, based on the total cubic contents of the tree. By the use of these factors it has been estimated that the total drain on our forest resources in 1930 due to consumption for use amounted to 3,056,930,373 cubic feet. To this total must be added the volume of material destroyed by fire, insects and fungi, which would bring the average annual depletion for the period 1926-30 to approximately 3,970,000,000 cubic feet of standing timber—as compared to 4,408,000,000 cubic feet for the period 1922-26 and 4,740,000,000 cubic feet for 1917-21. Table **3** gives the reported or estimated quantity of wood cut, by chief products, together with the respective converting factors, the equivalent in standing timber and the estimated value in each case for 1930. Table **4** shows the extent of the drain on our forest resources in 1929 and 1930, by provinces.

3.—Quantity of Wood Cut in Woods Operations in Canada, Equivalent in Standing Timber and Total Value, by Chief Products, 1930.

Product.		Quantity Reported or Estimated.	Converting Factor.	Equivalent Volume in Standing Timber.	Total Value.
				cubic feet.	$
Logs and bolts	M ft. b.m.	5,379,492	219	1,178,108,748	75,563,041
Pulpwood	cords	5,977,183	117	699,330,411	67,529,612
Firewood	"	10,148,960	95	964,151,200	43,786,064
Hewn ties	number	7,417,629	12	89,011,548	5,038,899
Square timber	M ft. b.m.	153,567	219	33,631,173	2,945,748
Poles	number	1,258,437	13	16,359,681	6,733,259
Round mining timber	cubic ft.	5,301,458	1·3	6.891,895	885,343
Posts	number	16,185,930	2	32,371,860	1,585,985
Wood for distillation	cords	38,139	123	4,691,097	335,330
Fence rails	number	5,753,810	2	11,507,620	624,968
Miscellaneous products	cords	178,420	117	20,875,140	1,825,245
Totals		–	–	**3,056,930,373**	**206,853,494**

4.—Equivalent Volumes of Standing Timber Cut in Canada and Values of Products of Woods Operations, by Provinces, 1929 and 1930.

Province.	Equivalent Volumes in Standing Timber.		Total Values.	
	1929.	1930.	1929.	1930.
	cubic feet.	cubic feet.	$	$
Prince Edward Island	10,747,881	11,001,310	529,666	533,931
Nova Scotia	120,246,169	128,377,416	7,716,067	8,589,205
New Brunswick	195,588,102	179,844,960	15,788,394	13,991,127
Quebec	810,931,266	1,000,825,308	65,537,957	73,493,851
Ontario	776,378,800	719,125,633	60,999,431	53,381,944
Manitoba	92,235,022	94,913,732	4,964,348	5,015,898
Saskatchewan	102,912,066	109,262,403	4,878,995	5,100,417
Alberta	142,474,289	116,647,253	6,244,173	5,896,861
British Columbia	839,106,052	696,932,358	52,911,098	40,850,260
Totals	**3,090,614,647**	**3,056,930,373**	**219,570,129**	**206,853,494**

The following statement summarizes the quantities and values, in the calendar year 1930, of the main products of the woods which are sold without further manufacture and of the two principal industries utilizing the forest resources, and shows the value of the forests as a source of wealth. It is estimated that in the further manufacture of wood and paper into such products as sash, doors, furniture, caskets and paper goods, at least $75,000,000 is added to the value of these products.

QUANTITIES AND VALUES OF CHIEF FOREST PRODUCTS IN CANADA, 1930.

Item.		Quantity.	Value of Product.	Number of Persons Employed.
			$	
Lumber Industry—				
Lumber	M ft. b.m.	2,497,553	46,136,340	–
Lath	M pcs.	228,050	576,080	–
Shingles	"	1,453,277	3,331,229	–
Totals		–	50,043,649	22,361
Pulp and Paper Industry—				
Paper manufactured	tons	2,926,787	173,626,383	–
Pulp exported	"	760,220	39,059,979	–
Totals		–	212,686,362	33,207
Woods Operations—				
Logs and timber exported	M ft. b.m.	386,446	5,744,391	–
Pulpwood exported	cords	1,330,466	13,611,617	–
Poles	pcs.	1,258,437	6,733,259	–
Mining timber	cu. ft.	5,301,458	885,343	–
Posts	pcs.	16,185,930	1,585,985	–
Fence rails	"	5,753,810	624,968	–
Railway ties	"	7,417,629	5,038,899	–
Fuelwood	cords	10,148,960	43,786,064	–
Distilled wood	"	38,639	335,330	–
Miscellaneous	"	5,753,810	624,968	–
Total		–	78,970,824	–
Grand Total		–	341,700,835	–

Subsection 2.—The Pulp and Paper Industry.

The manufacture of pulp and paper is a comparatively recent development in Canadian industry. Paper was first manufactured in Canada about a hundred years ago but prior to 1860 no wood-pulp was used or produced. Rags, straw, esparto grass, cotton waste and other substances were the raw materials used. The first paper-mill was established at St. Andrews in Quebec (then Lower Canada) in 1803 by a party of Americans who obtained concessions from the seigneurs. Upper Canada's first mill, which is still in operation, was built in 1813 at Crook's Hollow (now Greensville) near Hamilton, and the Maritime Provinces entered the industry in 1819 with a mill at Bedford Basin near Halifax.

In 1866, Alexander Buntin installed at Valleyfield, Quebec, what is claimed to have been the first wood grinder in America and began the manufacture of wood-pulp by the mechanical process. During the same year Angus Logan and Co. built the first chemical wood-pulp mill in Canada at Windsor Mills in Quebec. During the next decade the use of wood-pulp in paper-making was extensively developed and in 1887 Charles Riordon installed the first sulphite mill in Canada at Merritton in the Niagara Peninsula; by the beginning of the century the output of the industry had exceeded $8,000,000. In 1907 the Brompton Pulp and Paper Co. built, at East Angus in Quebec, the first mill in America to manufacture chemical pulp by the sulphate or kraft process.

The gross output of the industry increased rapidly and steadily until the boom years following the Great War, when it jumped to a peak of over $232,000,000 in 1920. This was followed by a drop in 1921, following which there was a steady recovery, resulting in a total for 1929 of $243,970,761 exceeding the abnormally high total value reported in 1920. There was a decrease of 11·6 p.c. in 1930 and of 19 p.c. in 1931.

The rapid development of this industry was due chiefly to the existence in Canada of abundant water powers adjacent to extensive forest resources of pulpwood species. Summary statistics for the combined pulp and paper industry are given on p. 304.

There are to-day three classes of mills in the industry. These in 1931 numbered 32 mills making pulp only, 43 combined pulp and paper-mills, and 28 mills making paper only. The present tendency is toward the merging of individual companies into a comparatively small number of large groups.

The industry in Canada includes three forms of industrial activity, the operations in the woods with pulpwood as a product, the manufacture of pulp and the manufacture of paper. These three stages cannot be treated as entirely distinct nor can they be separated from the different stages of the lumber industry. Some of the important pulp companies operate sawmills to utilize the larger timber on their limits to the best advantage, and many lumber manufacturers divert a proportion of their spruce and balsam logs to pulp-mills. So far as operations in the woods are concerned, it is often impossible to state whether the timber being cut will eventually be made into lumber or into pulpwood.

On account of legislation already referred to, pulpwood cut on Crown lands must, in every province, be manufactured into pulp in Canadian pulp-mills. The pulpwood which is exported to the United States is cut from private lands. Table 5 shows the annual production of this commodity from 1920 to 1931, together with the quantities used by Canadian pulp-mills and the quantities exported. For figures for the years 1908 to 1919 inclusive, see the 1931 Year Book, p. 288.

5.—Production, Consumption, Export and Import of Pulpwood, calendar years 1920-31.

Year.	Apparent Total Production of Pulpwood in Canada.			Canadian Pulpwood Used in Canadian Pulp-mills.		Canadian Pulpwood Exported Unmanufactured.[1]		Imported Pulpwood Used in Canada.	
	Quantity.	Total Value.	Average Value per cord.	Quantity.	Per cent of Total Production.	Quantity.	Per cent of Total Production.	Quantity.	Per cent of Total Production.
	cords.	$	$	cords.	p.c.	cords.	p.c.	cords.	p.c.
1920	4,024,826	61,183,060	15·22	2,777,422	69·0	1,247,404	31·0	None Reported.	
1921	3,273,131	52,900,872	16·16	2,180,578	66·6	1,092,553	33·4		
1922	3,923,940	50,735,361	12·93	2,912,608	74·2	1,011,332	25·8		
1923	4,654,663	57,119,596	12·27	3,270,433	70·3	1,384,230	29·7		
1924	4,647,201	57,777,640	12·43	3,316,951	71·4	1,330,250	28·6		
1925	5,092,461	62,181,537	12·23	3,668,959	72·0	1,423,502	28·0		
1926	5,621,305	68,100,303	12·14	4,229,567	75·2	1,391,738	24·8		
1927	5,929,456	70,284,895	11·85	4,387,687	74·0	1,541,769	26·0		
1928	6,295,912	74,587,833	11·85	4,763,646	75·7	1,532,266	24·3	32,674	0·7
1929	6,536,335	76,120,063	11·65	5,241,340	80·2	1,294,995	19·8	37,082	0·7
1930	5,977,183	67,529,612	11·30	4,646,717	77·7	1,330,466	22·3	94,632	1·6
1931	5,046,291	51,973,243	10·30	4,088,988	81·0	957,303	19·0	59,291	1·4

[1] Exports of pulpwood in the calendar year 1932 were 529,019 cords.

In 1908 almost two-thirds of the pulpwood cut in Canada was exported in the raw or unmanufactured form but by 1916 the proportion had declined to two-fifths. In 1931 the proportion exported was less than a fifth.

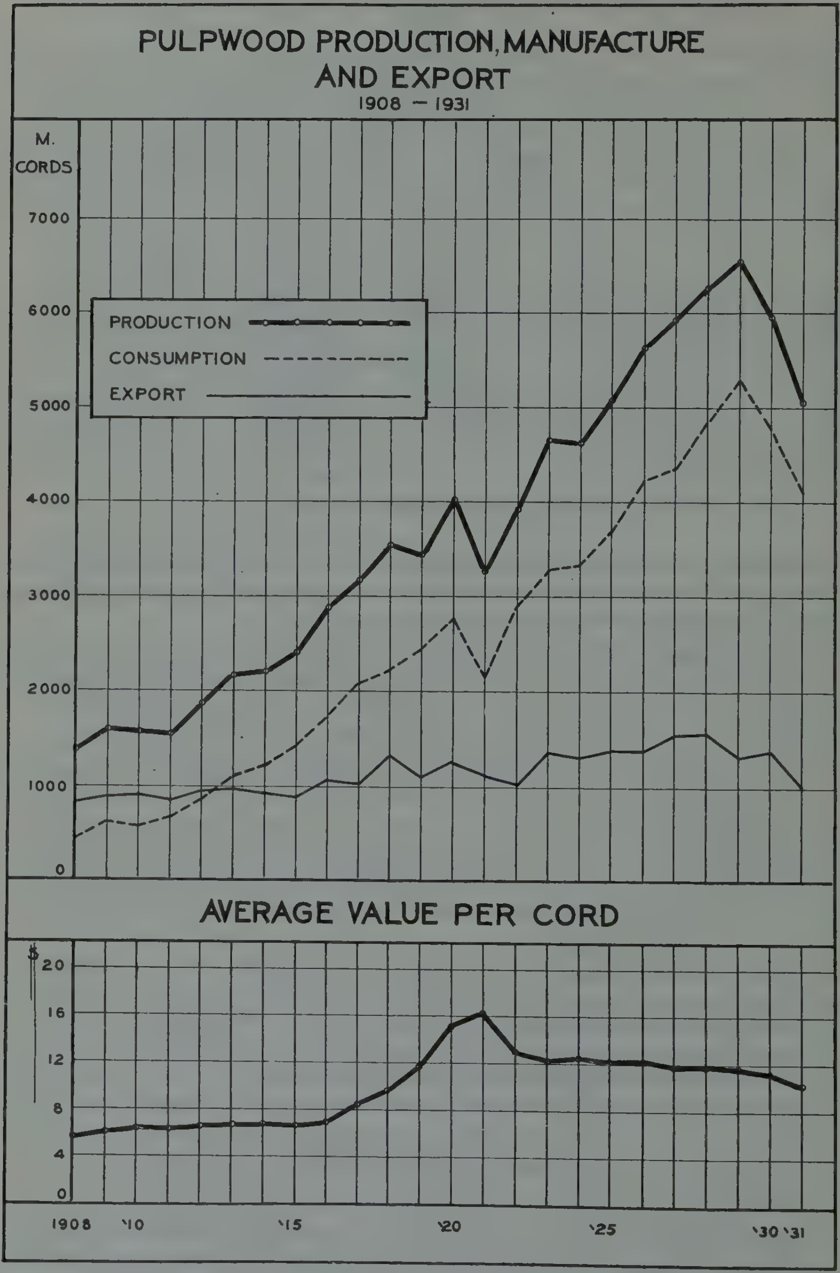
The manufacture of pulp is the second stage in this industry. This is carried on by mills producing pulp alone and also by paper manufacturers operating pulp-mills in conjunction with paper-mills to provide their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export.

The supply of rags for paper-making is distinctly limited and the material too expensive for the manufacture of cheap paper. Early paper-makers experimented with fibres from the stems, leaves and other parts of numerous annual plants, but the small proportion of paper-making material recoverable from such sources led to experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable for the production of all but the best classes of paper.

The preliminary preparation of pulpwood is frequently carried on at the pulp-mill, but there are in Canada a number of "cutting-up" and "rossing" mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for exportation. Pulpwood is measured by the cord (4′ by 4′ by 8′ of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood.

There are in Canada four methods of preparing wood-pulp, one of which is mechanical and three chemical. Detailed descriptions of these processes were given in the 1931 Year Book, pp. 290-1.

Pulp Production.—Table 6 shows the total production of pulp in Canada from 1920 to 1931 inclusive, together with the production of groundwood pulp and the production of fibre by the chemical processes described. Comparable statistics for 1908 to 1919 inclusive appear at p. 293 of the 1931 Year Book.



PULPWOOD PRODUCTION, MANUFACTURE AND EXPORT
1908 — 1931

AVERAGE VALUE PER CORD

6.—Pulp Production, Mechanical and Chemical, calendar years 1920-31.

Year.	Total Production.[1]		Mechanical Pulp.		Chemical Fibre.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1920	1,960,102	141,552,862	1,090,114	49,890,337	848,528	90,053,999
1921	1,549,082	78,338,278	931,560	32,313,848	612,467	45,929,513
1922	2,150,251	84,947,598	1,241,185	31,079,429	897,533	53,615,692
1923	2,475,904	99,073,203	1,419,547	37,587,379	1,012,092	60,674,518
1924	2,465,011	90,323,972	1,427,782	36,165,901	986,242	53,313,823
1925	2,772,507	100,216,383	1,621,917	39,130,117	1,084,992	59,969,673
1926	3,229,791	115,154,199	1,901,268	44,800,257	1,125,178	69,220,427
1927	3,278,978	114,442,550	1,922,124	44,174,811	1,278,572	69,169,002
1928	3,608,045	121,184,214	2,127,699	47,549,324	1,392,755	72,500,188
1929	4,021,229	129,033,154	2,420,774	51,617,360	1,501,273	76,198,051
1930	3,619,345	112,355,872	2,283,130	48,317,494	1,265,057	63,156,351
1931	3,167,960	84,780,809	2,016,480	37,096,768	1,151,480	47,684,041

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[1] These totals include some unspecified pulp and screenings.

The growth of this industry was steady up to 1920, when 1,960,102 tons of pulp were produced. There was a drop in production in 1921, but production in 1922 more than overtook the previous year's drop. Since then, with the exception of 1924, each year up to 1929 showed consistent growth in the annual production, 1929 creating a record for the industry with a production of 4,021,229 tons. The 1931 figure of 3,167,960 tons marks a decrease of 12 p.c. from 1930.

During 1931 there were 32 mills manufacturing pulp only and 43 combined pulp and paper-mills. These 75 establishments turned out 3,167,960 tons of pulp, valued at $84,780,809, as compared with 3,619,345 tons cf pulp, valued at $112,355,872 in 1930. Of the 1931 total for pulp 2,423,300 tons, valued at $54,004,119, were made in the combined pulp and paper-mills for their own use in manufacturing paper. Of the remainder, 94,172 tons, valued at $3,864,000, were made for sale in Canada, while 650,488 tons, valued at $26,912,690, were made for export. As in the case of pulpwood, a part of the product at this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as pulp.

Over 63 p.c. of the production in 1931 was groundwood pulp and over 20 p.c. unbleached sulphite fibre, these two being the principal components of newsprint paper. Bleached sulphite, sulphate and soda fibre made up the remainder, with screenings, for which a considerable market has developed in recent years in connection with the manufacture of rigid insulating boards. Table 7 shows the production of pulp by provinces in the last six years.

7.—Production of Wood-Pulp in Canada, by Chief Producing Provinces, 1926-31.

Year.	Quebec.		Ontario.		Canada.[1]	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1926	1,672,339	59,218,576	1,095,987	38,008,752	3,229,791	115,154,199
1927	1,749,965	60,884,169	1,007,118	35,034,468	3,278,978	114,442,550
1928	2,018,566	67,467,328	1,050,335	35,708,079	3,608,045	121,184,214
1929	2,174,805	69,286,498	1,255,010	39,963,767	4,021,229	129,033,154
1930	1,833,000	58,703,067	1,043,559	31,463,873	3,619,345	112,355,872
1931	1,513,658	41,884,387	858,100	22,944,933	3,167,960	84,780,809

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[1] Includes production in British Columbia, Manitoba, New Brunswick and Nova Scotia.

Pulp Exportation.—The following table gives the quantities of pulp exported by the principal pulp-producing countries of the world in 1931. Figures for 1913, the year immediately preceding the War, and for 1930 are shown for comparison. Figures of the exports of wood-pulp from Canada in the fiscal years ended Mar. 31, 1929-32, will be found in Table **12** of the chapter on External Trade. In the calendar year 1932 the exports of wood-pulp from Canada were 452,293 tons.

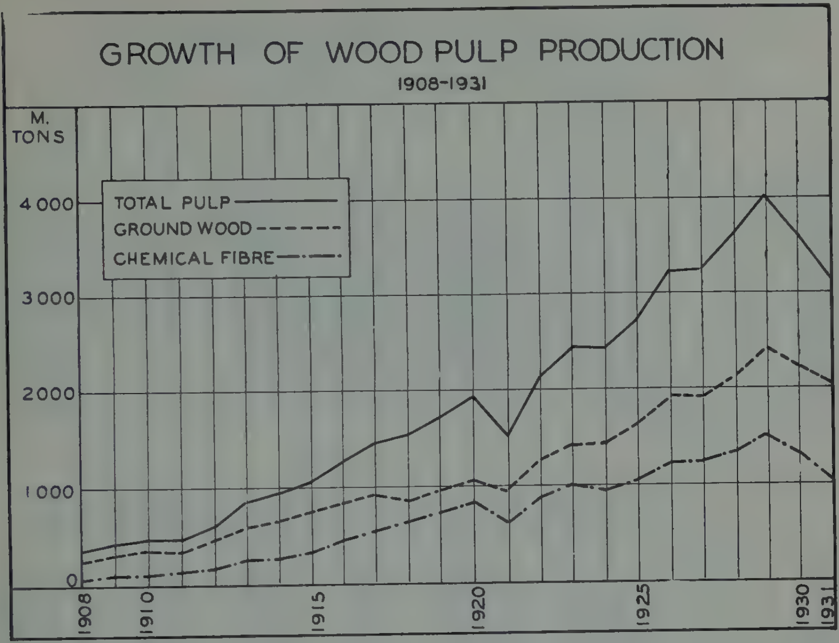
The total exports of the eleven principal pulp-exporting countries of the world in 1931 were 5,058,446 short tons, of which Canada contributed about 12 p.c.

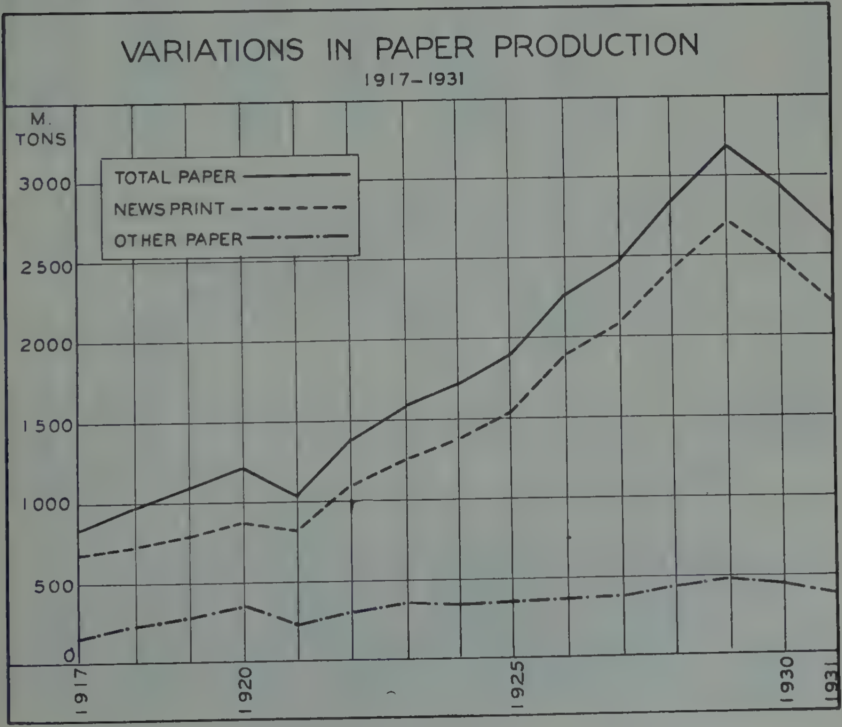
8.—Exports of Wood-Pulp from Principal Wood-Pulp Producing Countries of the World, calendar years 1913, 1930 and 1931.

Country.	Years ended Dec. 31—				
	1913.	1930.	1931.	Proportion, 1931.	
	Total Wood-Pulp.	Total Wood-Pulp.	Total Wood-Pulp.	Chemical.	Mechanical.
	tons.	tons.	tons.	tons.	tons.
Sweden	1,112,313	2,073,072	2,000,778	1,455,653	545,125
Finland	132,674	869,864	1,061,603	775,232	286,372
Norway	779,025	939,723	716,119	145,393	570,726
Canada	**298,169**	**760,221**	**622,537**	**452,927**	**169,610**
Germany	206,042	322,414	316,062	307,964	8,098
Austria	112,714	128,786	133,411	115,988	17,422
Czechoslovakia	23,935	112,181	128,736	128,736	–
United States	19,776	48,426	53,307	51,227	2,080
Poland	–	13,245	17,330	17,330	–
Switzerland	7,328	8,769	8,563	5,890	2,673
Newfoundland	57,165	–	–	–	–
Totals, Eleven Principal Countries	**2,749,141**	**5,276,701**	**5,058,446**	**3,456,340**	**1,602,106**

Paper Production.—The paper-making stage of the industry involves the consumption of wood-pulp and other paper stock in the manufacture of paper and other pulp products. Accurate annual statistics for this part of the industry are available only for the years 1917 to 1931 inclusive. These are given in Table **9**.

During 1931 there were 43 combined pulp and paper-mills and 28 mills making paper only. These 71 establishments produced 2,611,225 tons of paper, together with certain miscellaneous pulp products, with a total value of $143,957,264, as compared to 2,926,787 tons, valued at $173,626,383 in 1930. Newsprint paper forms about 85 p.c. of the annual paper production in Canada. In 1931, the production of newsprint paper was 2,227,052 tons, valued at $111,419,637, reaffirming Canada in the position of largest producer of newsprint in the world. The preliminary estimate for 1932 is 1,907,566 tons.


GROWTH OF WOOD PULP PRODUCTION
1908-1931
M. TONS
4000
3000
2000
1000
0
TOTAL PULP
GROUND WOOD
CHEMICAL FIBRE
1908
1910
1915
1920
1925
1930
1931


VARIATIONS IN PAPER PRODUCTION
1917-1931
M. TONS
3000
2500
2000
1500
1000
500
0
TOTAL PAPER
NEWS PRINT
OTHER PAPER
1917
1920
1925
1930
1931

9.—Summary of Paper Production in Canada, calendar years 1917-31.

Year.	Newsprint Paper.		Book and Writing Paper.		Wrapping Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1917	689,847	38,868,084	48,141	9,310,138	50,360	5,646,750
1918	734,783	46,230,814	48,150	10,732,807	61,180	7,341,372
1919	794,567	54,427,879	58,228	12,571,000	59,697	7,979,418
1920	875,696	80,865,271	73,196	21,868,807	77,292	12,161,303
1921	805,114	78,784,598	53,530	12,550,520	52,898	6,634,211
1922	1,081,364	75,971,327	64,808	12,500,504	81,793	8,219,841
1923	1,251,541	93,213,340	76,789	13,582,135	84,912	7,666,174
1924	1,388,081	100,276,903	67,934	12,605,623	89,441	8,027,918
1925	1,536,523	106,268,641	74,724	13,145,407	91,417	8,130,102
1926	1,889,208	121,064,946	80,403	14,765,725	97,057	8,552,400
1927	2,082,830	132,286,729	75,072	12,916,469	102,707	9,607,828
1928	2,414,393	144,146,632	79,138	14,008,406	111,667	10,424,217
1929	2,725,331	150,800,157	73,502	13,636,562	91,374	9,725,876
1930	2,497,952	136,181,883	69,468	12,261,659	78,320	7,880,224
1931	2,227,052	111,419,637	59,580	10,154,171	77,194	7,479,993

Year.	Boards.		Other Paper Products.		Totals, Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1917	54,080	3,543,164	11,261	1,382,205	853,689	58,855,258
1918	87,749	5,551,409	35,862	3,267,142	967,724	73,123,544
1919	137,678	8,892,046	40,065	3,882,500	1,090,235	87,752,843
1920	158,041	12,904,662	30,726	4,222,724	1,214,951	132,022,767
1921	89,120	6,225,948	18,285	2,358,658	1,018,947	106,553,935
1922	113,200	7,000,081	25,650	2,508,325	1,366,815	106,260,078
1923	130,582	8,480,233	45,479	4,242,488	1,589,303	127,184,370
1924	135,252	8,228,760	38,033	4,180,293	1,718,741	133,319,497
1925	144,646	8,378,621	37,395	4,237,904	1,884,705	140,160,675
1926	155,469	8,825,804	44,006	4,973,352	2,266,143	158,277,078
1927	161,497	8,985,788	46,585	4,433,926	2,468,691	168,445,548
1928	193,061	10,656,200	50,940	5,069,950	2,849,199	184,305,405
1929	250,061	13,539,645	56,881	5,287,012	3,197,149	192,989,252
1930	233,217	12,193,829	47,830	4,788,279	2,926,787	173,626,383
1931	202,854	10,225,732	44,545	4,350,356	2,611,225	143,957,264

Newsprint made up about 85 p.c. of the total paper production in 1931, with nearly 8 p.c. of paper boards, 3 p.c. of wrapping paper, over 2·3 p.c. of book and writing paper and nearly 1·7 p.c. of other miscellaneous papers.

10.—Production of Paper in Canada, by Provinces, 1931.

Province.	Quantity.	Value.
	tons.	$
Quebec	1,275,105	71,385,954
Ontario	792,011	45,535,894
British Columbia	244,397	12,182,112
Nova Scotia, New Brunswick and Manitoba	299,712	14,853,304
Totals	**2,611,225**	**143,957,264**

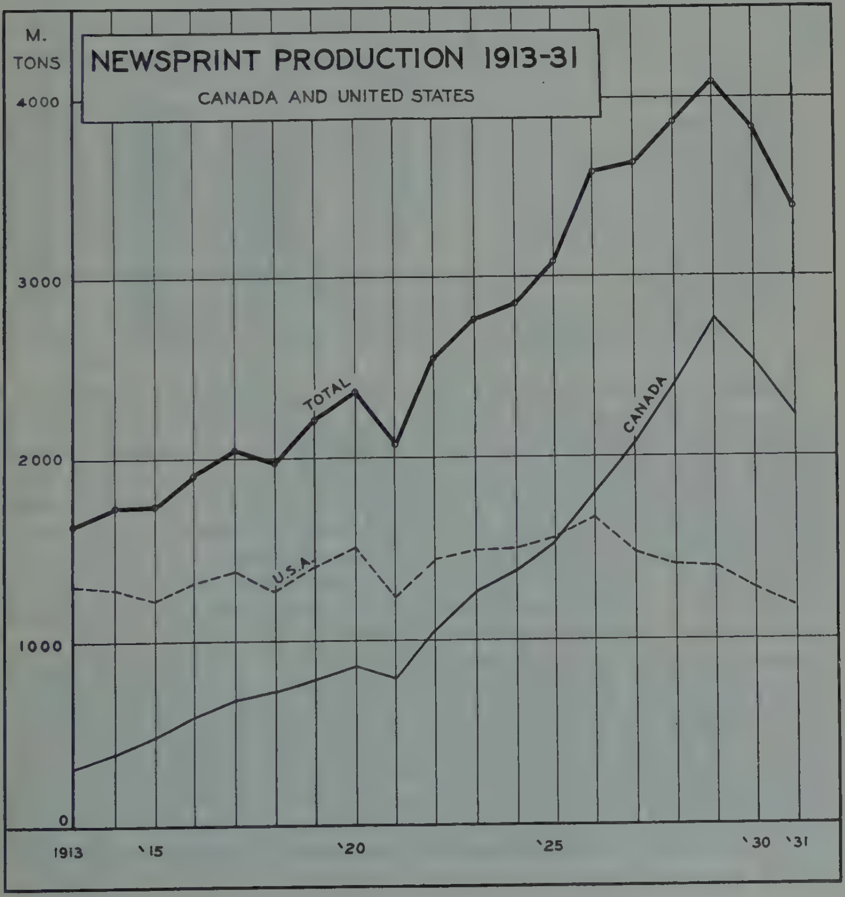
Quebec produced 49 p.c. of the total quantity, Ontario 30 p.c., British Columbia 9 p.c. and Nova Scotia, New Brunswick and Manitoba the remainder.

World Production of Newsprint.—The world production of newsprint in 1931 has been estimated at 6,622,000 short tons, of which North America supplied over 55 p.c. and Canada alone over a third. The estimated production in the leading 23 countries, compared with 1930, and the five-year average 1927-31, was as follows:—

11.—Estimated Quantities of Newsprint Produced in 23 Leading Countries, 1930 and 1931, and the Five-Year Averages, 1927-31.

NOTE.—Countries by order of importance according to five-year average, 1927-31.

Country.	Production.		Five-year Average.	Country.	Production.		Five-year Average.
	1930.	1931.			1930.	1931.	
	tons.	tons.	tons.		tons.	tons.	tons.
Canada	**2,504,000**	**2,221,000**	**2,384,000**	Italy	69,000	69,000	55,000
United States	1,282,000	1,157,000	1,344,000	Russia	90,000	100,000	51,000
Great Britain	608,000	719,000	645,000	Belgium	50,000	44,000	50,000
Germany	590,000	540,000	584,000	Switzerland	47,000	49,000	45,000
Japan	285,000	258,000	268,000	Czechoslovakia	44,000	42,000	44,000
Newfoundland	287,000	295,000	254,000	Spain	32,000	62,000	35,000
Sweden	240,000	265,000	251,000	Poland	27,000	27,000	23,000
Finland	223,000	241,000	219,000	Estonia	29,000	17,000	23,000
France	240,000	243,000	190,000	Mexico	14,000	15,000	16,000
Norway	202,000	104,000	177,000	Denmark	10,000	10,000	13,000
Netherlands	84,000	79,000	79,000	Latvia	4,000	3,000	3,000
Austria	64,000	62,000	59,000	**Totals**	**7,025,000**	**6,622,000**	**6,812,000**



Exportation of Newsprint Paper.—In the fiscal year 1908, exports of printing paper were for the first time separately recorded, and valued at $2,833,535. In the fiscal year 1913, when quantities were first shown, Canada exported 256,661 short tons valued at $9,980,378. In 1931 our exports of newsprint amounted to 2,008,241 tons valued at $107,233,112 and ranked second only to wheat among the exports of the Dominion. For exports of newsprint and other paper in the fiscal years ended Mar. 31, 1929-32, see Table **12** of the chapter on External Trade.

As early as 1913 Canada led the world in the exportation of newsprint, and since that date her exports have increased almost eight-fold in quantity. The following table shows the exportation of newsprint from the 13 principal exporting countries in 1913, 1929, 1930 and 1931. Canada contributed to the total over 61 p.c. or more than all the other 12 countries combined in 1931. Canada's exports of newsprint paper for the calendar year 1932 were 1,276,764 tons.

12.—Exports of Newsprint Paper from Principal Paper-Producing Countries of the World, 1913, 1929, 1930 and 1931.

NOTE.—Countries arranged in order of importance of exports, 1931.

Rank in 1931.	Country.	Year ended Dec. 31— 1913.	1929.	1930.	1931.
		tons.	tons.	tons.	tons.
1	**Canada**	**256,661**	**2,515,495**	**2,332,510**	**2,008,241**
2	Newfoundland	49,755	243,923	279,482	299,511
3	Germany	75,761	254,336	203,527	229,233
4	Finland	77,213	191,395	206,970	210,350
5	Sweden	67,938	217,682	193,022	201,834
6	Norway	108,507	189,210	188,624	96,539
7	United Kingdom	105,153	107,673	88,877	66,340
8	Japan	3,270	57,658	72,530	61,823
9	Austria	14,855	54,000	58,492	59,729
10	Netherlands	–	32,019	35,327	28,713
11	United States	43,301	18,696	10,204	9,652
12	Czechoslovakia	–	13,105	10,026	8,648
13	Switzerland	12	10,594	9,638	3,675
	Totals, Principal Countries	**802,426**	**3,905,786**	**3,689,229**	**3,284,288**

Statistics of the Combined Pulp and Paper Industries.—While the manufacture of pulp and that of paper are properly two industries, the existence of combined pulp and paper-mills makes it impossible to separate many of their statistics. Considering the manufacturing part of the industry as a whole, there were altogether 103 mills in operation in 1931 and 109 in 1930. The capital invested in 1931 amounted to $630,176,540, the employees numbered 26,669 and their salaries and wages amounted to $34,792,113. If we disregard pulp made "for own use" in combined pulp and paper-mills, the total value of the raw materials used in the industry as a whole amounted to $63,947,678 and the gross value of production to $174,733,954. The difference between these two, or the net value of production, represents the value added by manufacture and amounted in 1931 to $110,786,276. The pulp and paper industry, now the leading single manufacturing industry in Canada, has been first in wages and salaries paid since 1922, when it first exceeded the sawmills. It has been the leading industry in gross value of production since 1925, when it replaced the flour mills, and also first in net value of production since 1920, when it outstripped the sawmills in this respect. Only the manufacturing stages of the industry are considered in these comparisons, no allowance being made for capital invested, men employed, wages paid nor primary products sold in connection with the woods operations which form such an important part of the industry as a whole but cannot be separated from woods operations carried on in connection with sawmills and other industries. If the $9,359,592 worth of exported pulpwood be taken into consideration, the gross total contribution of the pulp and paper industry toward a favourable trade balance for Canada in 1931 amounted to $139,844,299, representing the difference between exports and imports of pulpwood, pulp, paper and paper products.

The United States market absorbs annually all of Canada's pulpwood exports, about 79 p.c. of her pulp and 85 p.c. of her paper shipments. The remainder goes to the United Kingdom and other widely distributed overseas markets. About half of the paper consumed in the United States is either of Canadian manufacture or is made from wood or wood-pulp imported from Canada.

Subsection 3.—The Lumber Industry.

The manufacture of lumber, lath, shingles and other products of the sawmill is the second most important industry in Canada depending on the forest for its raw materials. Annual statistics covering this and other forest industries were collected and published by the Forest Service of the Department of the Interior from 1908 to 1916, since when the work has been carried on by the Dominion Bureau of Statistics, in co-operation with the Forest Service.

The production of sawn lumber in Canada in 1920 reached a total of over four billion feet board measure, the highest cut recorded since 1912. Owing to the subsequent depression the production of lumber in 1921 decreased by over a third and the average value by over $10 a thousand feet. Since that year there have been annual increases in cut for Canada as a whole except in 1927, 1930 and 1931. British Columbia now produces over half the total. Table **13** gives the production of lumber, lath and shingles in each year from 1920 to 1931; comparable figures for 1908 to 1919 inclusive are given at p. 300 of the 1931 Year Book.

13.—Quantities and Values of Lumber, Lath and Shingles Produced in Canada, calendar years 1920-31.

Year.	Lumber Cut.		Shingles Cut.		Lath Cut.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. b.m.	$	M	$	M	$
1920	4,298,804	168,171,987	2,855,706	14,695,159	762,031	5,248,879
1921	2,869,307	82,448,585	2,986,580	10,727,096	804,449	4,188,121
1922	3,138,598	84,554,172	2,506,956	10,397,080	1,031,420	5,660,328
1923	3,728,445	108,290,542	2,718,650	9,617,114	1,153,735	6,324,747
1924	3,878,942	104,444,622	3,129,501	10,406,293	1,165,819	5,975,253
1925	3,888,920	99,725,519	3,156,261	11,154,773	1,292,963	6,415,927
1926	4,185,140	101,071,260	3,299,397	10,521,723	1,378,366	6,527,060
1927	4,098,081	97,508,786	2,837,281	8,716,085	1,322,665	5,603,396
1928	4,337,253	103,590,035	2,865,994	10,321,341	1,138,417	4,802,616
1929	4,741,941	113,349,886	2,707,235	9,423,363	835,799	2,860,799
1930	3,989,421	87,710,957	1,914,836	5,388,837	398,254	1,154,593
1931	2,497,553	46,136,340	1,453,277	3,331,229	228,050	576,080

The total number of sawmills, tie, shingle, lath, veneer, stave, heading and hoop mills, and mills for cutting-up and barking or rossing of pulpwood operating in 1931 was 3,562, as compared with 3,531 in 1930. The capital invested in these mills in 1931 was $121,336,176, the employees numbered 22,361 and their wages and salaries amounted to $16,409,674. The logs, bolts and other raw materials of the industry were valued at $37,379,034 and the gross value of production was $62,927,750. The net production, or the value added by manufacture, in 1931 was $25,548,716.

The production of sawn lumber decreased in quantity from 1930 to 1931 by 37·4 p.c. Lath production decreased by 42·7 p.c., and shingle production by 24·1 p.c. Decreases were reported in the production of all but a few of the minor products. The total gross value of production decreased from $121,142,985 in 1930 to $62,927,750 in 1931; for production by provinces for the latter year see Table **14**.

14.—Quantity and Value of Lumber and Value of Other Sawmill Products Made in Canada, by Provinces, 1931.

Province.	Lumber Production.		Other Sawmill Products.	Total.
	Quantity.	Value.	Value.	Value.
	M ft. b.m.	$	$	$
Prince Edward Island	4,552	101,177	14,287	115,464
Nova Scotia	103,816	1,645,244	815,509	2,460,753
New Brunswick	130,412	2,445,087	1,089,355	3,534,442
Quebec	399,581	8,778,618	6,554,576	15,333,194
Ontario	417,959	10,855,605	1,934,079	12,789,684
Manitoba	29,654	511,703	35,884	547,587
Saskatchewan	18,416	320,953	14,058	335,011
Alberta	50,999	756,810	64,818	821,628
British Columbia	1,342,164	20,721,143	6,268,844	26,989,987
Totals	**2,497,553**	**46,136,340**	**16,791,410**	**62,927,750**

British Columbia comes first in total production, contributing 53·7 p.c. of the total cut in lumber and 80·1 p.c. of the shingles. Quebec comes second in total production, Ontario third and New Brunswick fourth. Douglas fir was the most important kind of lumber sawn, being produced almost entirely in British Columbia. Spruce is sawn in every province and comes second, with white pine, hemlock and yellow birch next in order of importance. Cedar is the most important shingle wood sawn. The conifers usually form about 95 p.c. of the total cut of all kinds of wood in this industry, only 5 p.c. being deciduous-leaved trees or hardwoods.

Lumber Exportation.—The square timber trade reached its maximum development in the '60's, thereafter declined gradually and has now almost entirely disappeared. Simultaneously with its decline came the increased exportation of deals and other sawn lumber, first to Great Britain and later to the United States. Our trade with the latter country has been from the first largely confined to planks, boards and dimension stock. During the American Civil War our exports of forest products of all kinds to the United States for the first time exceeded those to Great Britain, but in late years this has become invariable. The total quantity of sawn lumber exported from Canada changed little during the first 30 years of the century, averaging about two billion feet board measure per annum. The exports in 1931 amounted to 937,733 feet board measure, valued at $20,116,020, of which the United States took the greater part. The exports of lumber, lath and shingles decreased in 1931 as compared with 1930.

Subsection 4.—Summary of Primary Forest Production.

For the purpose of comparing primary industries such as agriculture, fishing, forestry and mining, forestry production is here understood to consist of the total value of the products of woods operations, together with the value added by manufacture in sawmills and pulp-mills, but not in paper-mills. Forestry production under this system of classification, amounted to $303,145,169 in 1930 or about 20 p.c. of the total primary production for the Dominion, which was estimated at $1,525,528,806. Forest production, therefore, stood in second place in this respect, being exceeded by agriculture with $758,791,743 or 50 p.c. and followed by mining, with $279,873,578 or 18 p.c.

Subsection 5.—Other Forest Industries.

Sawmills and pulp-mills draw their raw material directly from the forest in the form of logs and pulpwood, and produce sawn lumber, other sawmill products and pulp and paper. There are also a number of important industries which use these products as raw material for further manufacture. Some of them produce commodities made almost entirely of wood, wood-pulp or paper, others manufacture articles in which wood is the most important component, and others produce articles in which wood is necessary but forms only a small proportion of the value. There are, in addition, a number of industries which use wood indirectly in the manufacture of articles which do not contain wood as a component part. The first class includes the manufacture of paper, sash, doors and other millwork and planing-mill products; boxes, baskets, cooperage and other containers; canoes, boats and small vessels; kitchen, bakers' and dairy woodenware; wooden pumps, piping, tanks and silos; spools, handles, dowels and turnery. The second class includes the manufacture of furniture, vehicles and vehicle supplies, coffins and caskets, etc., and the use of paper in printing and the manufacture of paper boxes, bags, stationery and paper goods. The third class, where wood has a secondary importance, includes the manufacture of agricultural implements, railway rolling stock, musical instruments, brooms and brushes, etc. The fourth class can be said to include practically every form of industrial activity, as few, if any, of these are entirely independent of the use of wood, directly or indirectly.

Subsection 6.—Manufactures of Wood and Paper.

A classification based on the chief component material in the products of each manufacturing establishment is now largely used in comparing manufacturing industries and for external trade purposes. Under this system most of the forest industries fall in the wood and paper group. In 1931 the gross value of production for all classes of manufactured products amounted to $2,698,461,862 of which total the wood and paper group contributed $484,237,930 or nearly 18 p.c. It was exceeded in this respect by the vegetable products with nearly 20 p.c. Of the ten groups of the industrial census the wood and paper group, which includes the manufacture of lumber, pulp and paper as well as the wood- and paper-using industries, was highest in number of establishments with 7,767, in capital invested with $1,053,064,435 in total number of employees with 121,672, and in salary and wage distribution with $140,349,106.

In few industries did manufacture add, in 1931, a higher percentage to the raw material used than in the wood- and paper-using industries; in the manufacture of pulp and paper this percentage is 173 and in the lumber industry, 68. By the manufacture of lumber into planing-mill products its value is increased by 91 p.c. For the wood and paper group as a whole the net value of production, or the value added by manufacture, in 1931 was $291,858,015, or 152 p.c. of the value of raw materials used. In respect also of the net value of production the wood and paper group of industries surpasses any other group of manufactures. Further details are given in the Manufactures chapter of the present volume.

The forests of Canada contribute an important part to her export trade. During the fiscal year ended Mar. 31, 1932, exports of forest origin amounted to $175,740,269 and made up 30·4 p.c. of the total value of exports for the period, amounting to $576,344,302. Exports of forest origin were exceeded only by those of farm origin, which made up 35·4 p.c. of the total and were followed by products of mineral origin with 17 p.c. Forest products are also prominent among the individual items of exportation. Newsprint paper is second only to wheat on the list, with wood pulp third and sawn lumber sixth. The gross contribution of the forest toward a favourable trade balance for Canada amounted to $144,054,459 during the same period, exceeding all other groups in this respect.

Subsection 7.—Forest Depletion and Increment.

Fire Losses.—No accurate summing up of forest fire losses in Canada's forests has ever been made, but it has been estimated that 60 p.c. of the original forest has been burned, 13 p.c. has been cut for use and 27 p.c. remains. Though the loss of merchantable timber has been greatly reduced in recent years by forest protective services and the education of the public, it still constitutes a serious drain on our resources. At a low estimate fire destroys annually about 230,000,000 cubic feet of merchantable timber and the young growth on 550,000 acres.

Since the historic Miramichi fire, which burned along the valley of the Miramichi river in New Brunswick in 1825, there have been a number of disastrous forest fires. About 1845 vast areas, west of lake Superior, were burned over. Some years later a very extensive fire burned along the height of land from lake Timiskaming to Michipicoten. In 1871 a fierce fire swept over more than 2,000 square miles of forest from lake Nipissing westward along the north shore of Georgian bay. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. Two other fires in 1891 and 1896 devastated more than 2,000 square miles of country in the southern Algoma district; in Quebec, the country along the line of the Quebec and Lake St. John Railway also suffered by a number of disastrous forest fires about this time.

During more recent times a series of disastrous fires swept over northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated, on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at $3,000,000. In 1916, fires in the same general region were responsible for the deaths of at least 224 people. In 1922 a third fire destroyed the town of Haileybury and other centres. In 1908, a fire originating in the forest around Fernie, B.C., destroyed that city. Every year thousands of acres are devastated by fires of less individual importance, which in the aggregate are rapidly depleting our forest resources. In 1923 there were unusually disastrous fires, chiefly in Eastern Canada. A total area of over 6,000,000 acres was burned over with a loss of approximately $46,000,000.

Speaking generally, there are annually two periods in Canada when the forest fire hazard is highest—in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the herbaceous growth is dead and the ground covered with dry leaves.

Statistics compiled by the Dominion Forest Service from reports received from the various provincial and private forest protective organizations, show that during the last ten years—from 1922 to 1931—86·5 p.c. of all fires reported were due to human agencies and were therefore preventable. The remainder were attributed to lightning. Campers, settlers and railways are responsible for most of the fires whose origin is determined. Other causes, including lumbering operations, lightning and incendiarism, account for smaller proportions.

Losses through Insects and Fungi.—From 1912 to 1923 the spruce bud-worm caused tremendous damage to the spruce and balsam fir forests in Eastern Canada. In Quebec it was estimated that 100 million cords of pulpwood were destroyed by this insect, and in New Brunswick the loss was placed at 15 million cords. In this region the active stage of the infestation is now practically over, but the insect is causing damage in northern Ontario and Cape Breton island. Other insects, though not as destructive as this one, entail a heavy drain on the forest. The hemlock looper and a new species closely related to the spruce bud-worm are causing considerable damage in eastern coniferous forests. During the last few years dusting by aeroplane has been developed on a practical basis by the Entomological Branch of the Department of Agriculture and promises to be effective in the control of defoliating insects. The loss caused by the various forms of rot and other fungous diseases is probably not less than that caused by insects under normal conditions. The butt rot is especially prevalent in balsam fir, and the value of the hardwoods is also greatly decreased by rot.

Summary of Losses and Increment.—The annual consumption of standing timber for use amounts to about 2,970,000,000 cubic feet. During the last few years fire has destroyed annually about 230,000,000 cubic feet of merchantable timber and the young growth of various ages on 550,000 acres. The destruction occasioned by insects, fungi and windfall is not known, but is estimated at 700,000,000 cubic feet per annum. It may be safely estimated that the forests of Canada are being depleted at the rate of upwards of 3,900,000,000 cubic feet per annum. With about 600,000 square miles of accessible timber in a growing condition, an average annual increment of 10 to 11 cubic feet per acre would be quite possible under forest management and would cover this depletion. In view of the destruction of young growth which occurs and the deterioration of the forests and the soil, caused by repeated fires, there is little hope that this increment is being produced at the present time throughout Canada, although particular areas are producing greatly in excess of this quantity. Extensive reproduction and rate of growth surveys being conducted by the Dominion Forest Service indicate that the increment is greater than previously estimated.

CHAPTER X.—THE FUR TRADE.[1]

Historical Sketch.—The place which the fur trade held during the French *régime* in Canada, when for a century and a half it was at once the mainspring of discovery and development and the curse of settled industry, is familiar history. Later, the Hudson's Bay Company may be said with truth to have held the West until the Dominion had grown to absorb it, bequeathing to the civilization which followed a native race accustomed to the white man and an example of organization and discipline that was of lasting value. The salient facts in the story are given in the following paragraphs.

From the earliest times the Basque and Breton fishermen from the "Banks" had traded for furs. As the French court demanded more and more furs, adventurers came for the fur trade exclusively. Pont-Gravé and Chauvin built Tadoussac in 1599 as a centre for this trade with the Indians of the Saguenay and, when trade routes were discovered farther inland, the founding of Quebec and Montreal followed. The French Government from the first granted monopolies of the fur trade, always on the condition that the company should bring to Canada a stated number of settlers. But settlement and the fur trade could never go together—settlement, by driving fur-bearing animals farther afield, made trade increasingly expensive, and the great profits of the fur trade, together with its freedom and romance, took the more adventurous from the rational pursuits of settlers. Trade spread west and south by the river routes, convoys bringing the furs yearly to Montreal and Quebec. The de Caen Company, in the seventeenth century, sent yearly to France from 15,000 to 20,000 pelts. "Beaver" was made the Canadian currency.

In the meantime, English navigators had been seeking a Northwest Passage to the Orient. By 1632 their efforts came to an end with little practical result. Hudson bay, however, had been accurately charted, so that when the first English fur-trading ships came some 30 years later, they sailed by charted routes to a safe harbour. The first expedition came at the instigation of Radisson and Groseilliers, two French *coureurs des bois* who had travelled in the rich fur country north of lake Superior. They had sought aid in France but, being repulsed, turned to England. The charter of the "Adventurers of England trading into Hudson's Bay" was obtained in 1670 by Prince Rupert, uncle of Charles II, who became first Governor of the company (whence the name Rupert's Land). During the struggle with the French, beginning about 1685, no dividends were paid but with the English victory the company resumed payments. Forts were built on Hudson bay and James bay at the mouths of rivers; the company, as monopolist, waited for the furs to be brought to its posts.

With the Seven Years' War, the fur trade from the south passed out of the hands of the French, and until 1771 the English were busy re-discovering the old French routes to the West. A period of open competition followed. The discoverer of a new fur district was soon followed by competitors who undersold him and were undersold by him until some or all were ruined and left for new fields. The Northwest Company, founded in 1783-4, was a result of such competition. No capital was deposited, but each party supplied a proportion of the articles needed for trade. The Northwest Company pursued a vigorous policy, founding posts to control all the best fur districts. The Hudson's Bay Company felt the keenness of the competition, and was forced to abandon its ancient policy of waiting for furs to be brought to the bay. By 1816 the rivals had absorbed or ruined eleven other partnerships and were themselves on the verge of ruin. Finally, in 1821, the two were joined under the name of the older company. The Northwest Company brought with it the control of the Pacific and Arctic watersheds, to be added to the lands draining into Hudson bay, and over the whole region the Hudson's Bay Company secured legal recognition of its monopoly of the fur trade. There followed 40 years of great prosperity. The company's rights of exclusive trading in Indian territory expired in 1859, and ten years later it surrendered its other privileges. In return, Canada granted £300,000 to the company, as well as lands about its trading posts, and one-twentieth of the land in the fertile belt between the North Saskatchewan river and the International Boundary. The Hudson's Bay Company thereupon became a trading company, with no extraordinary privileges.

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[1] Revised by Miss F. A. Brown, Chief of the Fur Statistics Branch, Dominion Bureau of Statistics. This Branch publishes a detailed Annual Report on the Production of Raw Furs (Wild Life), obtainable from the Dominion Statistician.

The Modern Industry.—Great changes have come over the fur trade in recent years. The railway has revolutionized conditions wherever its influence reaches. Vessels now ply the larger lakes and rivers and the aeroplane is frequently used in transporting furs from the more inaccessible districts. Competition has increased and new territory is eagerly sought as in the days prior to 1821. Increase in trapping and improved methods of capture, together with the advance of lumbering, mining and agricultural settlement, have driven fur-bearing animals farther and farther afield, and to conserve the fur resources of the country the Provinces have found it necessary to enact laws to regulate the capture of fur-bearing animals and to provide for close seasons during certain periods of each year. The fur trade has assisted in meeting the demand for furs by popularizing common and previously despised furs and by encouraging the use of the furs of domestic animals. Fur farming is playing an increasingly important part in the fur trade of Canada, the value of pelts of ranch-bred animals now representing about 26 p.c. of the total annual value of the raw fur production of the Dominion. The fox has proved the best suited for domestication, although other kinds of fur-bearers are being successfully raised in captivity—mink, raccoon, skunk, marten, fisher, muskrat and beaver. The successful breeding of the fox on fur farms came in the period of rising prices after 1890 and the introduction of woven wire fencing. About the middle of the last century Persian lamb, astrachan and broadtail, the product of the Karakul sheep, a native of Bokhara, Central Asia, came into general use. A few of these sheep were imported into Canada some years ago, but the industry as a source of supply for pelts has not shown progress in this country. Experiments in the breeding of rabbits for their fur have resulted in the production of several valuable kinds, chief among which are the Chinchilla rabbit, whose fur resembles that of the Bolivian Chinchilla, and the castorrex[1], named on account of the likeness of its fur to that of the beaver.

The important markets for Canadian furs are London and New York: the trade figures for the twelve months ended June 30, 1932, show that of the total of $11,495,086 worth of raw furs exported, the United Kingdom received $6,316,529 and the United States, $3,908,773. At the close of the Great War Montreal took a position as an international fur market, holding the first Canadian fur auction sale in 1920 when 949,565 pelts, valued at $5,057,114, were sold. The most recent figures show that at the auction sales held in Montreal during 1931 there were 1,381,130 pelts disposed of, with a total value of $4,731,648. Sales are also held at Winnipeg and Edmonton. An important industry in Canada in connection with the fur trade is that of the dressing and dyeing of furs. In 1931 the number of fur skins treated in Canadian plants was 7,034,498 and the amount received for the work, $1,571,740. The plants in operation numbered 10.

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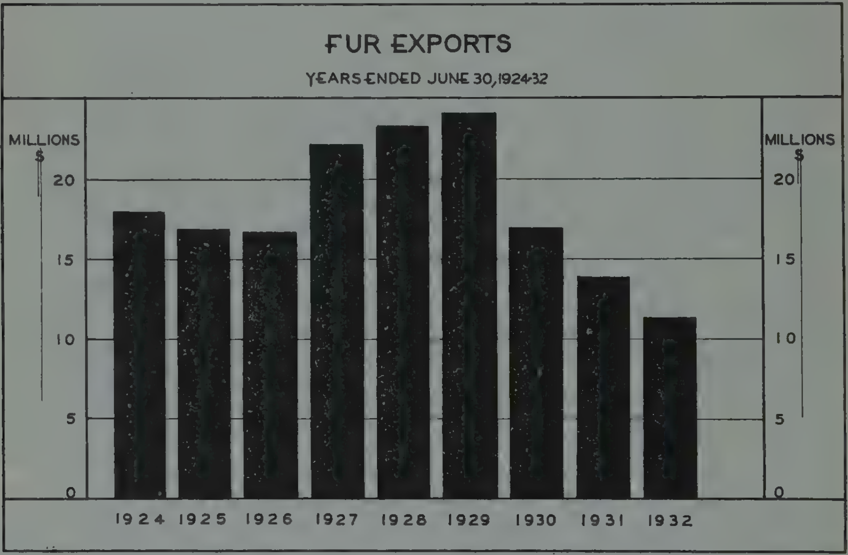
[1] Castor is the French word for beaver.

Exports.—Though the bison is gone forever and the beaver and the marten are slowly following, the fur trade of Canada is in no immediate danger of extinction. A century ago the value of the export trade in furs exceeded that of any other product. This has been greatly changed, yet the total output has not declined and Canada may be described as one of the great fur preserves of the world. In 1667 exports of furs to France and the West Indies were valued at 550,000 francs. In 1850, the first year for which trade tables of the Province of Canada are available, the value of raw furs exported was £19,395 ($93,872); for the twelve months ended June 30, 1920, the value was $20,417,329; for 1925, $17,131,172; for 1930, $15,357,386 and for 1931, $13,544,088. Raw furs to the value of $11,495,086 were exported during the twelve months ended June 30, 1932, the British market taking $6,316,529 worth and the United States most of the rest. The chart below shows the fluctuation of fur exports between the seasons 1924 and 1932. The area which will continue to furnish the historic peltries when settlement has planted its furthest outpost will still have to be reckoned by the hundreds of thousands of square miles. It is the function of the fur trade to turn this vast domain to perpetual economic use.

For a review of the fur-farming industry of Canada, see Chapter VIII, pp. 248 to 251.



Conservation.—The conservation of the wild life of Canada has been made a special object of government policy through the organization, in 1916, of the Advisory Board on Wild Life Protection, to co-ordinate the efforts of various Departments and Branches of the Dominion Government in matters relating to the conservation of the wild-life resources of Canada. The Northwest Game Act and the Migratory Birds Convention Act are the most important subjects to which the attention of the Board is specially directed and upon which it makes recommendations. In addition, the Board investigates and studies all problems relating to the protection and better utilization of all fur-bearing animals, "big game" mammals and to bird life, whether game birds, insectivorous birds or others. The Board serves entirely without remuneration and during the whole period of its existence has incurred no expenditure.

In all provinces and territories of the Dominion, regulations governing the taking of fur-bearing animals are in force, and most kinds are protected during certain seasons of the year. In cases where special protection is necessary to avoid extermination of the species, the killing of the animals is prohibited over a period of years. Licences are required for trapping and trading, and direct revenue is derived by the provinces and territories from raw furs. The activities of the Dominion as a whole, with respect to wild life, are co-ordinated through biennial conferences of provincial and Dominion game protection officials. These conferences are called by the Department of the Interior and have assisted in evolving efficient plans for the preservation of Canada's wild-life resources.

Fur Trade Statistics.—Statistics of the number and value of raw furs and skins taken were collected at the decennial census of 1881 and thereafter till 1911, the figures showing a value of $987,555 taken in 1880, $768,983 in 1890, $899,645 in 1900 and $1,927,550 in 1910. In 1920 the Dominion Bureau of Statistics commenced the annual collection of returns from fur traders, but arrangements were subsequently made with the provinces whereby the provincial game departments undertook to supply annually to the Bureau statements of the number and value of pelts taken in the respective provinces, the information being based on royalties, export taxes, etc. The figures of pelts taken and their values are given for the available years in Table **1**. The high value shown for 1920 is due to the inflated prices of that time.

1.—Summary of the Numbers and Values of Pelts of Fur-bearing Animals Taken in Canada, years ended June 30, 1920-32.

Year ended June 30.	Pelts.	Value of Pelts.	Year ended June 30.	Pelts.	Value of Pelts.
	No.	$		No.	$
1920	3,600,004	21,387,005[1]	1927	4,289,233	18,864,126
1921	2,936,407	10,151,594	1928	3,601,153	18,758,177
1922	4,366,790	17,438,867	1929	5,150,328	18,745,473
1923	4,963,996	16,761,567	1930	3,798,444	12,158,376
1924	4,207,593	15,643,817	1931	4,060,356	11,681,221
1925	3,820,326	15,441,564	1932	4,415,715	10,156,225
1926	3,686,148	15,072,244			

[1] Fur prices in this year were abnormally high. Any comparison of this figure with those of later years should take this into account.

Details by provinces of the numbers of pelts taken in the two latest years are given in Table **2**.

2.—Numbers and Values of Pelts of Fur-bearing Animals Taken in Canada, years ended June 30, 1931 and 1932.

Province.	Numbers of Pelts.		Values of Pelts.	
	1930-31.	1931-32.	1930-31.	1931-32.
			$	$
Prince Edward Island	16,331	20,696	760,764	693,314
Nova Scotia	75,628	62,546	427,351	403,882
New Brunswick	58,013	74,779	504,160	549,329
Quebec	383,108	410,900	2,106,108	2,334,262
Ontario	944,711	952,850	2,188,586	1,857,397
Manitoba	407,297	577,607	698,261	689,396
Saskatchewan	614,238	593,486	1,132,718	1,043,739
Alberta	941,399	1,121,728	1,121,533	877,333
British Columbia	186,518	201,522	650,779	576,102
Northwest Territories	371,281	341,922	1,945,737	999,203
Yukon	61,832	57,679	145,224	132,268
Totals	**4,060,356**	**4,415,715**	**11,681,221**	**10,156,225**

Among the provinces Quebec occupies first place in value of raw fur production, its output in 1931-32 being valued at $2,334,262. Ontario is second with $1,857,397, and Saskatchewan third with $1,043,739. The relation of raw fur production in each province to the total of Canada in 1931-32 is shown by the following percentages: Quebec, 22·98; Ontario, 18·27; Saskatchewan, 10·27; Northwest Territories, 9·83; Alberta, 8·63; Prince Edward Island, 6·82; Manitoba, 6·78; British Columbia, 5·67; New Brunswick, 5·48; Nova Scotia, 3·97; and Yukon, 1·30.

The silver fox occupies first place among the fur producers of Canada, the value of the pelts of this kind in the season 1931-32 representing 30 p.c. of the total raw-fur production. Although the silver fox is of first importance in Canada as a whole, other fur bearers take the lead in some of the provinces. In the Maritime Provinces and Ontario the silver fox is first, in Quebec and the Northwest Territories the white fox leads, in the Prairie Provinces, the muskrat, and in British Columbia and Yukon, the beaver.

The following table gives details of raw-fur production by kinds.

3.—Kinds, Numbers, Total Values and Average Values of Pelts of Fur-bearing Animals Taken in Canada, years ended June 30, 1931 and 1932.

Kind.	Numbers of Pelts.		Total Values of Pelts.		Average Values per Pelt.	
	1930-31.	1931-32.	1930-31.	1931-32.	1930-31.	1931-32.
			$	$	$	$
Badger	8,039	4,968	139,923	63,130	17·41	12·71
Bear, black and brown	4,634	2,754	22,923	9,012	4·95	3·27
Bear, grizzly	1	–	12	–	12·00	–
Bear, white	261	130	2,130	850	8·16	6·54
Beaver	51,313	64,473	757,943	747,342	14·77	11·59
Coyote or prairie wolf[1]	21,190	23,542	253,048	211,603	11·94	8·98
Ermine (weasel)	545,763	827,646	415,964	516,067	0·76	0·62
Fisher or pekan	3,282	2,739	150,416	128,202	45·83	46·81
Fitch	–	180	–	574	–	3·19
Fox, cross	8,955	11,333	384,483	320,564	42·94	28·29
Fox, red	28,671	36,590	445,095	408,637	15·52	11·17
Fox, silver	71,816	107,473	3,216,217	3,089,179	44·78	28·74
Fox, blue	1,127	1,232	47,882	27,386	42·49	22·23
Fox, white	71,877	67,416	1,669,701	1,373,809	23·23	20·38
Fox, unspecified	278	312	4,071	4,116	14·64	13·19
Lynx	7,976	8,283	206,015	164,752	25·83	19·89
Marmot	41	–	21	–	0·50	–
Marten or sable	25,879	21,778	408,901	289,450	15·80	13·29
Mink	97,083	131,920	904,348	986,281	9·32	7·48
Muskrat	2,639,086	2,601,660	2,143,148	1,391,010	0·81	0·53
Otter	8,685	8,214	171,053	136,004	19·70	16·56
Rabbit (Chinchilla)	79	155	43	78	0·54	0·50
Rabbit (other)	99,145	60,464	7,210	3,520	0·07	0·06
Raccoon	17,265	19,840	86,201	81,290	4·99	4·09
Skunk	89,186	113,901	106,198	94,282	1·19	0·83
Squirrel	248,564	288,793	24,815	28,853	0·10	0·10
Wild cat	464	800	1,974	4,290	4·25	5·36
Wolf[1]	7,063	6,876	103,174	69,662	14·60	10·13
Wolverine or carcajou	864	536	6,063	3,030	7·02	5·65
Deer	272	487	408	1,948	1·50	4·00
Moose	263	115	789	687	3·00	5·97
Panther or cougar	491	701	982	526	2·00	0·75
Domestic cat	133	404	39	91	0·29	0·23
Gopher	610	–	31	–	0·05	–
Totals	**4,060,356**	**4,415,715**	**11,681,221**	**10,156,225**	–	–

[1] Coyote or prairie wolf pelts for Manitoba are included with wolf pelts.

CHAPTER XI.—THE FISHERIES.[1]

Section 1.—The Early Fisheries.

Fishing is one of the earliest and most historic industries of Canada. From a date which precedes authentic record, the Normans, the Bretons and the Basques were on the cod banks of Newfoundland. Cabot, in 1498, when he first sighted the mainland of North America, gave it the name of "Bacalaos", the Basque word for cod fish which he found already in use among those hardy seamen. Cape Breton, one of the oldest place-names in America, is another memorial of the early French fishermen—and the Spaniards and the Portuguese were but little behind. Fernandez de Navarrete mentions all three as frequenters of the Grand Bank before 1502. The fishing was by hand lines over barrels made fast to the bulwarks to prevent fouling, the vessels remaining during fine weather then returning to France with from 30,000 to 50,000 cod. Voyages along the coast soon showed the cod as plentiful inshore as on the outer banks, and it became common for a crew to anchor in a bay, erect a hut on shore, and make daily excursions to the fishing grounds. The product was salted and dried on land and at the end of the season shipped to France. In 1534 Jacques Cartier found traces in the gulf of St. Lawrence of these early "Captains Courageous" and their rivalries in arms, as well as in the capture of the teeming product which had tempted them so far from home. An establishment of the kind just mentioned was founded at Tadoussac by Chauvin in 1599. Soon the fishermen began to stay all winter and thus to erect permanent fishing settlements. Fishing, therefore, may well be regarded as the first industry to be systematically prosecuted by Europeans in what is to-day the Canadian domain. It has never since ceased to yield a perennial harvest to both Europe and America.

By the Treaty of Utrecht in 1713, Britain became the owner of Newfoundland and excluded France from fishing and drying fish on certain sections of the coast, but France retained rights of fishing and of drying fish on other sections of the Newfoundland coast together with the fisheries of Cape Breton and the Gulf. These French rights resulted in the French shore question which remained unsettled for nearly two centuries. The Seven Years' War (1756-63) put a stop to continuous fishing. At its close the Robin family of Jersey came to Canada and gradually acquired the former French fishing stations. Until the arrival of the Loyalists all other fishing but cod was neglected. Inshore fisheries alone (including those of the Labrador coast) were developed during this phase; no deep-sea fishing vessel put out from Lunenburg, now the chief centre of the deep-sea fishery, until 1873.

Section 2.—The Canadian Fishing Grounds.

The fishing grounds of the Dominion of Canada are perhaps the most extensive in the world. On the Atlantic, from Grand Manan to Labrador, the coast line, not including the lesser bays and indentations, measures over 5,000 miles. The bay of Fundy, 8,000 square miles in extent, the gulf of St. Lawrence, fully ten times that size, and other ocean waters comprise not less than 200,000 square miles, or over four-fifths of the area of the fishing grounds of the North Atlantic.

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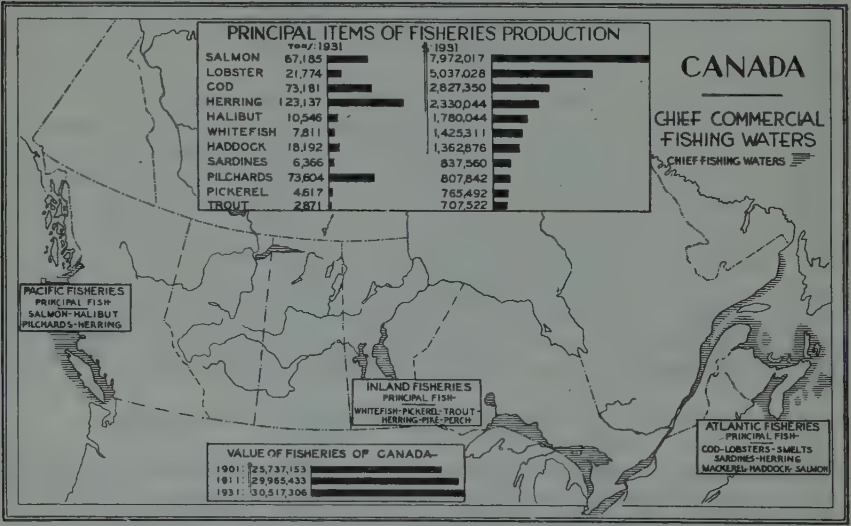
[1] Revised by Miss F. A. Brown, Chief, Fisheries Statistics Branch, Dominion Bureau of Statistics. This Branch publishes an Annual Report on the Fisheries Statistics of Canada, together with advance summaries on Fish Caught, Marketed and Prepared, by provinces. These may be obtained from the Dominion Statistician.

In addition there are on the Atlantic seaboard 15,000 square miles of inshore waters controlled entirely by the Dominion. Large as are these areas, they represent only a part of the fishing grounds of Canada. The Pacific coast of the Dominion measures 7,180 miles in length and is exceptionally well sheltered. Throughout the interior is a series of lakes which together contain more than half of the fresh water on the globe—Canada's share of the Great Lakes alone amounts to over 34,000 square miles, a total which of course does not include lake Winnipeg (9,457 square miles), lake Manitoba and others of even greater area.

Still more important than the extent of the Canadian fishing grounds is the quality of their product. It is an axiom among authorities that food fishes improve in proportion to the purity and coldness of the waters from which they are taken. Judged by this standard, the Canadian cod, halibut, herring, mackerel, whitefish and salmon are the peers of any in the world. It is possible, therefore, to state that by far the most valuable fisheries of the western hemisphere, if not of the globe, belong to Canada.

It will be seen from the above that it is impossible to deal adequately with the Canadian fisheries in the aggregate; they are those of a continent rather than of a country, and are of corresponding diversity. Omitting the enormous Hudson Bay and peri-Arctic region, which extends from Ungava to Alaska and the fish resources of which are not known, the Canadian fisheries may be divided into Atlantic, inland and Pacific fisheries.


PRINCIPAL ITEMS OF FISHERIES PRODUCTION
TONS: 1931
$ 1931
SALMON 67,185 7,972,017
LOBSTER 21,774 5,037,028
COD 73,181 2,827,350
HERRING 123,137 2,330,044
HALIBUT 10,546 1,780,044
WHITEFISH 7,811 1,425,311
HADDOCK 18,192 1,362,876
SARDINES 6,366 837,560
PILCHARDS 73,604 807,842
PICKEREL 4,617 765,492
TROUT 2,871 707,522
CANADA
CHIEF COMMERCIAL FISHING WATERS
CHIEF FISHING WATERS
PACIFIC FISHERIES
PRINCIPAL FISH
SALMON-HALIBUT
PILCHARDS-HERRING
INLAND FISHERIES
PRINCIPAL FISH
WHITEFISH-PICKEREL-TROUT
HERRING-PIKE-PERCH
ATLANTIC FISHERIES
PRINCIPAL FISH
COD-LOBSTERS-SMELTS
SARDINES-HERRING
MACKEREL-HADDOCK-SALMON
VALUE OF FISHERIES OF CANADA
1901: $25,737,153
1911: 29,965,433
1931: 30,517,306

A detailed description of these respective fishing grounds of Canada, of the fish caught on these grounds, and of the methods of fishing, will be found at pp. 222-5 of the 1932 Year Book.

Lobstering is another distinctive industry. In 1870, there were three lobster canneries on the Atlantic coast of Canada; in 1930 the canneries numbered 333 and gave work to 6,000 people: 30,000,000 lobsters is a normal catch. The difficulty of enforcing regulations as to the capture of undersized and spawning lobsters offers a constant problem in connection with the output, but with the co-operation of the fishermen there is hope that the fishery may be maintained and the annual harvest show no decline. In New Brunswick the canning of "sardines" (locally young herring and not a distinct type of fish) is second only to lobstering. Oysters, once plentiful everywhere, are now found in diminished quantities, but the Government is working towards the restoration of the industry through the development of oyster farming; favourable areas in Prince Edward Island waters have been seeded and the work in connection with oyster culture is being carried on under the direction of experts.

Section 3.—The Government and the Fisheries.

Upon the organization of the Government at Confederation, the administration of the Canadian fisheries and marine was placed in the charge of a Department of the Dominion Government, which then exercised complete jurisdiction over the fisheries under the supervision of a Minister, with a large staff of inspectors, overseers and guardians to enforce the fishery laws. Early in 1930 a change in departmental organization was effected, whereby two Departments, each in charge of a Minister, were created to administer respectively the Marine and the Fisheries.

In 1882, 1898, 1913 and 1920, decisions in the courts considerably altered the status of jurisdiction as between the Dominion and the provinces. The Dominion now controls the tidal fisheries of the Maritime Provinces and British Columbia and the fisheries of Yukon and the Northwest Territories, and the Magdalen islands. The non-tidal fisheries of the Maritime Provinces, the Prairie Provinces and Ontario, and both the tidal and non-tidal fisheries of Quebec (except the fisheries of the Magdalen islands) are controlled by the respective provinces, but the right of fisheries legislation for all provinces rests with the Dominion Government. [See the Fisheries Act (R.S.C. 1927, c. 73)]. The expenditure of the Dominion on the fisheries in the fiscal year 1931-32, including Civil Government salaries, contingencies, etc., was $2,045,891, and the revenue $105,937.

Conservation.—River and lake fisheries certainly, and sea fisheries probably, if left to themselves, conform to the economic law of diminishing returns. The Canadian Government, accordingly, has had for a main object the prevention of depletion, the enforcement of close seasons, the forbidding of obstructions and pollutions and the regulation of nets, gear and fishing operations generally. In addition, an extensive system of fish culture has been organized; the Dominion, in 1931, operated 23 main hatcheries, 9 subsidiary hatcheries and 7 salmon-retaining ponds at a cost of $271,160, and distributed 133,654,169 eggs, fry or older fish, mostly salmon and trout. The young fish are distributed gratis if the waters in which they are to be placed are suitable and are open to public fishing.

Investigations and experiments directed toward the culture of the oyster have been carried on since 1929 at Malpeque bay, P.E.I., by the Dominion Department of Fisheries. Extension of oyster-farming, as it is called, to New Brunswick waters is in prospect as a result of an agreement entered into in 1932 between the Dominion and New Brunswick authorities, whereby control of the oyster areas in the Westmorland County portion of Shediac bay was vested in the Department of Fisheries. Investigational work is now under way there with a view to introducing a farming plan similar to that followed in Prince Edward Island. The knowledge gained in these fields will doubtless be applied in other parts of the country which are found suited to commercial oyster culture.

Direct Assistance.—Since 1927 fish collection services have been operated on several stretches of the Atlantic coast by the Fisheries Branch of the former Department of Marine and Fisheries and by the present Department of Fisheries. Fishermen in the waters covered by the fish-collection boats are thus enabled to sell their catches promptly and have them delivered to purchasers at central points at small cost. They are also able to spend their time in catching fish instead of in preparing their catches for the dried and cured-fish markets. Again a system has been established of broadcasting radio reports as to weather probabilities, bait and ice supplies, ice conditions along the coast and prevailing prices. Further, under authority of the Fish Inspection Act (R.S.C., 1927, c. 72), systems of instruction in improved methods of fish curing and barrel making have been in operation for several years.

Scientific Research.—Stations under the direction of the Biological Board of Canada for the conduct of biological research into the numerous complex problems furnished by the fisheries are established at Halifax, N.S., St. Andrews, N.B., and Nanaimo and Prince Rupert, B.C. The biological stations at St. Andrews and Nanaimo are concerned chiefly with problems of fish life, while at the fisheries experimental stations at Halifax and Prince Rupert, attention is devoted to the practical problems of the fishing industry. A marine biological station, chiefly for oyster investigation work, is conducted at Ellerslie, P.E.I., and a sub-station for salmon investigations at Cultus Lake, B.C. The Biological Board employs a permanent staff of scientists, and in addition, Toronto, McGill, Queens, Manitoba, British Columbia and the chief Maritime Province universities send workers to the several stations, chiefly professors and trained scientists. The life-histories of edible fishes, the bacteriology of fresh and cured fish, improved methods of handling and preparing fish, and numerous other practical problems have been taken up and scientific memoirs and reports issued.

International Problems.—The chief international fisheries problem is the question of the rights of the United States, whose fishermen were granted, by the Treaty of Versailles, certain privileges in the Canadian inshore fisheries. Losing these by the war of 1812, the United States, after 1818, surrendered all but their right to call at Canadian ports for shelter, wood, water, or to make repairs, and to fish around the Magdalen islands and on the north shore of the gulf of St. Lawrence from Point Joli eastward, and to dry and cure their fish in any of the unsettled bays on this portion of the North Shore.

Questions of interpretations to be placed on certain parts of the Treaty of 1818 were set at rest for the years 1854-66 by the Reciprocity Treaty. This treaty provided for the free admission into either country of the fish products of the other, and fishermen of each country were allowed to fish in the Atlantic territorial waters of the other, with the exception of specified rivers and other grounds.

In 1871, the Treaty of Washington revived the fishery provisions of the Reciprocity Treaty of 1854, and provided for a commission to determine the compensation to be paid by the United States as the difference in the value of the concessions mutually granted. This commission sat at Halifax in 1877, handing down the "Halifax Award", the amount of which was $5,500,000. In 1885, however, the United States terminated the fisheries articles of this treaty and a period of disagreement followed. A settlement was negotiated in 1888, when the plenipotentiaries of the two nations agreed to the "Unratified Treaty of 1888", which provided that United States fishing vessels were to be granted, without fee, annual licences authorizing them to purchase provisions and outfits in Canadian ports, to tranship catches and to ship crews. Out of this treaty grew the so-called *modus vivendi* licences. Since it was recognized that the treaty could not receive official sanction before the commencement of the fishing season, it was agreed that United States fishing vessels, on payment of $1.50 per registered ton, should receive annual licences conveying the above privileges. The treaty was rejected by the United States Senate but Canada continued to issue *modus vivendi* licences up to 1918, when arrangements were made for reciprocal privileges in the ports of either country. The arrangement was discontinued in the United States on July 1, 1921. In the following year the *modus vivendi* licences were revived in Canada but this system was terminated on Dec. 31, 1923, and United States fishing vessels are now limited to the provisions of the Treaty of 1818.[1]

On the Great Lakes also, the more important fishery problems, such as restocking and marketing, are necessarily international in character, and are complicated by the number of State Governments interested. Much the same situation has developed in British Columbia, where the sockeye of the Fraser are taken by the canners of Puget sound in quantities that largely exceed the catch of the Canadian canners, and by trap nets and other methods forbidden in Canadian waters. In 1906 an International Commission first discussed the question, while in 1922 the prohibition of sockeye fishing in the Fraser for five years, with a view to conservation, was recommended by a Parliamentary Commission.

The Halibut Fishery.—The halibut fishery on this side of the Pacific is engaged in only from Canadian and United States ports, but, owing to the fact that it is largely carried on beyond territorial waters, neither country alone can control it. At the same time it is in the interests of both countries that the fishery should be permanently maintained in a flourishing condition. The question of finding an adequate method of dealing with the matter was therefore referred to the Canadian-American Fisheries Conference that was appointed in 1918 by the Governments of the two countries to consider the settlement of outstanding fishery questions between Canada and the United States. In 1922 Canada proposed that the halibut question should be considered by itself. This was agreed to, and resulted in the treaty signed Mar. 2, 1923, "For the Protection of the Pacific Halibut". Under this treaty a close season in each year was provided for halibut fishing. A further convention, signed by the plenipotentiaries of both countries at Ottawa on May 9, 1930, and ratified by the Governments of the two countries on May 9, 1931, provided certain additional regulations in connection with the division of the waters into fishing areas, changing of dates for close seasons, etc. This revised convention provides a simpler and more responsive system of control than was previously possible.[2]

Fishing Bounties.—An important though indirect aftermath of the Washington Treaty remains. By an Act of 1882 (45 Vict., c. 18), for the development of the sea fisheries and the encouragement of boat-building, provision was made for the distribution annually among fishermen and the owners of fishing boats of $150,000 in bounties, representing the interest on the amount of the Halifax Award. An Act of 1891 (54-55 Vict., c. 42), increased the amount to $160,000, the details of the expenditure to be settled each year by Order in Council. For the year 1931 payment was made under authority of the Deep Sea Fisheries Act

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[1] Licences are being issued to United States' vessels for the fishing season of 1933, and these confer the privilege of entering Canadian ports to buy bait or to obtain supplies of water.

[2] For a pamphlet containing the text of this revised convention application should be made to the Department of Fisheries, Ottawa.

(R.S.C. 1927, c. 74) on the following basis: to owners of vessels entitled to receive bounty, $1 per registered ton, payment to the owner of any one vessel not to exceed $80; to vessel fishermen entitled to receive bounty, $6.80 each; to owners of boats measuring not less than 12 feet keel, $1 per boat; to boat fishermen entitled to receive bounty, $5.80 each. The claims paid numbered 11,157, compared with 10,308 paid in the previous year. The total amount paid in 1931 was $159,432. Details of the distribution of bounties for the years 1928 to 1931 are as follows:—

1.—Government Bounties Paid to Fishermen for the calendar years 1928-31.

Province.	Number of Men who Received Bounties.				Amount of Bounties Paid.			
	1928.	1929.	1930.	1931.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	$	$	$	$
Prince Edward Island.....	1,309	1,473	1,400	1,498	9,334	10,745	9,809	9,671
Nova Scotia...............	9,470	10,036	10,024	10,512	79,078	83,459	80,050	76,748
New Brunswick...........	2,240	2,504	2,849	3,221	19,388	20,311	23,414	24,643
Quebec....................	6,214	6,294	6,745	7,606	43,611	45,248	46,501	48,370
Totals.........	**19,233**	**20,307**	**21,018**	**22,837**	**151,411**	**159,763**	**159,774**	**159,432**

Fisheries Statistics.—The fisheries statistics of Canada are issued under an arrangement for statistical co-operation between the Dominion Bureau of Statistics, the Dominion Department of Fisheries and those branches of the different Provincial Governments having jurisdiction with regard to fisheries. The Fisheries Department of the Dominion Government exercises jurisdiction over the fisheries of the Maritime Provinces, the Northwest Territories, Yukon and British Columbia; and the Fisheries Branches of Ontario, Quebec, Manitoba, Saskatchewan and Alberta have jurisdiction over the fisheries of their respective provinces, excepting that in the case of Quebec the fisheries of the Magdalen islands are under the jurisdiction of the Dominion authorities. The province of British Columbia has a Fisheries Branch, but it does not engage in independent statistical work. Under the arrangement above referred to, the statistics of the catch and of the products marketed in the fresh state or domestically prepared are collected by the local fishery officers, checked in the Department of Fisheries and compiled in the Dominion Bureau of Statistics. In the case of manufactured fish products, schedules similar to those of other sections of the Census of Industry are sent by the Bureau to the operators of canneries, fish-curing establishments, etc., the fisheries officers assisting in securing expeditious and correct reports.

Section 4.—The Modern Fishing Industry.

The existing fishing industry of Canada is in the main the growth of the past half century. No comparable figures of production are available prior to the Confederation of the provinces, but about 1836 the production of fish in what are now the three Maritime Provinces had an estimated value of something like $1,500,000, while the production of Lower Canada was probably worth $1,000,000. In 1870 the total was $6,600,000 and this was more than doubled by 1878. In the '90's it passed $20,000,000 and in 1912, $34,000,000. The highest figure was reached in 1918, with over $60,000,000, but this was in a period of greatly inflated prices. Between that year and 1921 the total value of the products of the fisheries decreased and in the latter year was back to $34,000,000. From 1921 to 1926 a steady increase to $56,000,000 took place and in the following three years the value fluctuated around the $50,000,000 mark. The prevailing world-wide depression has affected the markets for fish products; the value dropped to $48,000,000 in 1930 and to $30,500,000 in 1931. These figures represent the total values of fish marketed, whether in a fresh, dried, canned, or otherwise prepared state.

The number of employees, which was 80,450 in 1929 and 79,558 in 1930, fell to 74,903 in 1931 and the capital invested in the industry which was $60,000,000 in 1918 and $62,579,000 in 1929, reached $64,026,297 in 1930 but decreased to $45,350,514 in 1931.[1]

Among individual fish products the cod and the salmon long disputed the primacy; if the record is taken back to early times, the cod is the most valuable fishery; in the past 30 years, however, the salmon has definitely taken the lead, and the heavy pack and relatively high price of lobsters have more than once sent cod down to third place as in 1927, 1929 and 1930. Halibut, for a number of years prior to 1931, occupied fourth place among the chief commercial fishes but in 1931 dropped to fifth place, yielding fourth place to herring. These changes have, of course, affected the relative standing of the provinces, British Columbia now occupying the leading place that in earlier times belonged to Nova Scotia, and producing in recent years fish products to nearly half the total value. The yearly record of production since 1870, the total production by provinces for the past six years, and the record by values of principal fish products for the past five years in descending order of importance, are shown in Tables **2, 3** and **4.** The aggregate value of production in 1931, $30,517,306, shows a decrease of 36·2 p.c. from the figure of $47,804,306 in 1930. The wide variations in prices from year to year make total values misleading. On the other hand, the quantities of different kinds of fish are stated in many different units and the total volumes of production are difficult to compare. An effort is made to overcome these difficulties in Table 7 by working out what the values would be in 1931 if prices had remained the same as they were in 1930. On this basis, the decrease due to smaller quantities was 21·2 p.c. and that due to lower prices 15·0 p.c.

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[1] For detailed historical statistics of the fisheries, see pp. 53-56 of Fisheries Statistics of Canada, 1931, obtainable from the Dominion Statistician.

2.—Total Values of the Products of the Fisheries of Canada, 1870-1931.

NOTE.—From 1870 to 1906 inclusive, years ended June 30; from 1908 to 1917 (a) inclusive, years ended Mar. 31; since and including 1917 (b), calendar years. No statistics are available for the nine months' period ended Mar. 31, 1907.

Year.	Value.	Year.	Value.	Year.	Value.	Year.	Value.
	$		$		$		$
1870	6,577,391	1886	18,679,288	1902	21,959,433	1918	60,259,744
1871	7,573,199	1887	18,386,103	1903	23,101,878	1919	56,508,479
1872	9,570,116	1888	17,418,510	1904	23,516,439	1920	49,241,339
1873	10,754,997	1889	17,665,256	1905	29,479,562	1921	34,931,935
1874	11,681,886	1890	17,714,902	1906	26,279,485	1922	41,800,210
1875	10,350,385	1891	18,977,878	1908	25,499,349	1923	42,565,545
1876	11,117,000	1892	18,941,171	1909	25,451,085	1924	44,534,235
1877	12,005,934	1893	20,686,661	1910	29,629,169	1925	47,942,131
1878	13,215,678	1894	20,719,573	1911	29,965,433	1926	56,360,633
1879	13,529,254	1895	20,199,338	1912	34,667,872	1927	49,123,609
1880	14,499,979	1896	20,407,425	1913	33,389,464	1928	55,050,973
1881	15,817,162	1897	22,783,546	1914	33,207,748	1929	53,518,521
1882	16,824,092	1898	19,667,121	1915	31,264,631	1930	47,804,216
1883	16,958,192	1899	21,891,706	1916	35,860,708	1931	30,517,306
1884	17,766,404	1900	21,557,639	1917 (a)	39,208,378		
1885	17,722,973	1901	25,737,153	1917 (b)	52,312,044		

3.—Total Values of the Products of the Fisheries, by Provinces, calendar years 1926-31.

Province.	1926.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$	$
Prince Edward Island	1,358,934	1,367,807	1,196,681	1,297,125	1,141,279	1,078,901
Nova Scotia	12,505,922	10,783,631	11,681,995	11,427,491	10,411,202	7,986,711
New Brunswick	5,325,478	4,406,673	5,001,641	5,935,635	4,853,575	4,169,811
Quebec	3,110,964	2,736,450	2,996,614	2,933,339	2,502,998	1,952,894
Ontario	3,152,193	3,670,229	4,030,753	3,919,144	3,294,629	2,477,131
Manitoba	2,328,803	2,039,738	2,240,314	2,745,205	1,811,962	1,241,575
Saskatchewan	444,288	503,609	563,533	572,871	234,501	317,963
Alberta	749,076	712,469	725,050	732,214	421,258	153,897
British Columbia	27,367,109	22,890,913	26,562,727	23,930,692	23,103,302	11,108,873
Yukon	17,866	12,090	51,665	24,805	29,510	29,550
Totals	**56,360,633**	**49,123,609**	**55,050,973**	**53,518,521**	**47,804,216**	**30,517,306**

4.—Quantities[1] and Values[2] of the Chief Commercial Fishes, calendar years 1927-31.

Kind of Fish.		1927.	1928.	1929.	1930.	1931.	Increase (+) or Decrease (-) 1931 compared with 1930.
Salmon	cwt.	1,541,447	2,286,151	1,550,780	2,362,529	1,343,701	– 1,018,828
	$	15,065,063	17,867,053	15,008,825	17,731,891	7,972,017	– 9,759,874
Lobsters	cwt.	316,831	332,437	372,820	407,265	435,490	+ 28,225
	$	5,426,176	5,183,988	5,696,542	5,214,643	5,037,028	– 177,615
Cod	cwt.	1,978,803	2,150,078	1,979,440	1,662,421	1,463,626	– 198,795
	$	4,881,980	6,285,777	5,394,636	4,288,813	2,827,350	– 1,461,463
Herring	cwt.	2,724,113	2,396,054	2,317,806	2,190,776	2,462,751	+ 271,975
	$	3,358,098	3,104,911	3,186,669	2,623,174	2,330,044	– 293,130
Halibut	cwt.	299,854	329,923	335,824	282,605	210,926	– 71,679
	$	3,945,312	3,812,321	4,832,296	2,871,455	1,780,044	– 1,091,411
Whitefish	cwt.	185,664	180,695	196,386	169,747	156,215	– 13,532
	$	2,192,738	2,192,567	2,453,703	1,818,941	1,425,311	– 393,630
Haddock	cwt.	421,709	481,708	545,400	486,344	363,850	– 122,494
	$	1,483,844	1,733,781	1,951,642	1,851,724	1,362,876	– 488,848
Sardines	brl.	174,695	285,990	249,194	129,459	63,660	– 65,799
	$	1,046,575	1,291,722	1,626,764	1,074,487	837,560	– 236,927
Pilchards	cwt.	1,368,582	1,610,252	1,726,851	1,501,404	1,472,085	– 29,319
	$	1,838,867	2,563,137	2,199,834	1,589,609	807,842	– 781,767
Pickerel or doré	cwt.	140,019	142,610	128,500	103,146	92,349	– 10,797
	$	1,347,589	1,616,442	1,453,847	939,762	765,492	– 174,270
Trout	cwt.	92,007	91,694	90,854	69,809	57,420	– 12,389
	$	1,397,294	1,347,779	1,324,775	1,031,979	707,522	– 324,457
Smelts	cwt.	82,762	91,877	83,984	66,121	74,522	+ 8,401
	$	1,117,330	1,241,452	1,190,908	853,034	652,837	– 200,197
Mackerel	cwt.	158,797	123,768	152,756	178,464	196,248	+ 17,784
	$	582,705	528,267	536,021	598,019	502,477	– 95,542
Ling cod	cwt.	49,916	50,772	48,489	49,591	50,987	+ 1,396
	$	401,259	366,101	415,776	333,564	239,014	– 94,550
Swordfish	cwt.	7,299	8,088	6,336	11,933	12,629	+ 696
	$	120,692	132,345	98,241	214,806	236,617	+ 21,811

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[1] Quantities caught. [2] Values marketed.

4.—Quantities[1] and Values[2] of the Chief Commercial Fishes, calendar years 1927-31—concluded.

Kind of Fish.		1927.	1928.	1929.	1930.	1931.	Increase (+) or Decrease (-) 1931 compared with 1930.
Perch	cwt.	34,573	53,176	67,055	43,762	51,415	+ 7,653
	$	272,687	763,315	616,722	346,649	231,736	- 114,913
Clams and quahaugs	brl.	57,712	63,320	67,739	64,709	56,053	- 8,656
	$	274,287	322,874	346,772	319,469	227,614	- 91,855
Oysters	brl.	21,650	21,493	24,959	23,942	24,337	+ 395
	$	197,781	214,180	226,876	205,019	193,563	- 11,456
Hake and cusk	cwt.	177,370	253,244	339,217	294,376	171,748	- 122,628
	$	232,404	368,237	517,311	431,566	191,898	- 239,668
Tullibee	cwt.	121,764	104,145	97,669	62,041	42,804	- 19,237
	$	633,150	612,931	687,731	461,676	190,421	- 271,255
Blue pickerel	cwt.	31,173	21,496	25,831	59,284	54,048	- 5,236
	$	187,038	257,952	333,220	420,917	178,359	- 242,558
Pike	cwt.	70,473	62,701	82,546	56,464	45,452	- 11,012
	$	356,992	362,922	409,970	228,905	161,674	- 67,231
Eels	cwt.	15,926	25,661	14,539	16,388	20,083	+ 3,695
	$	139,932	227,751	133,542	147,114	125,981	- 21,133

[1] Quantities caught. [2] Values marketed.

Operations in 1931.—Detailed Record of Production.—The total value of the products of the Canadian fishing industry in the calendar year 1931 was $30,517,306, as compared with $47,804,216 in 1930, $53,518,521 in 1929, $55,050,973 in 1928, $49,123,609 in 1927, $56,360,633 in 1926, $47,942,131 in 1925 and $44,534,235 in 1924. In Tables **5** and **6** will be found statements for the whole of Canada of each fish and fish product marketed in 1931, with comparative figures for the preceding year—Table **5** dealing with sea fish and Table **6** with products of the inland fisheries. In Table **7** an analysis is made of the change in the value of each product from the preceding year due to variations in price and quantity respectively. On the whole, prices were lower in 1931. In Tables **8** and **9** the numbers of the fish-canning and curing establishments are shown, together with the materials used and values of the products.

5.—Quantities and Values of Sea Fish and Products Marketed, calendar years 1930 and 1931.

Kind of Fish or Product.		1930.		1931.	
		Quantity.	Value.	Quantity.	Value.
			$		$
Cod, used fresh	cwt.	112,866	434,553	94,152	322,604
" fresh fillets	"	27,386	315,701	22,906	230,767
" green-salted	"	149,076	599,122	158,921	545,446
" smoked fillets	"	33,564	395,701	21,936	216,003
" smoked	"	–	–	137	822
" dried	"	322,960	2,116,889	275,814	1,247,684
" boneless	"	24,760	252,524	22,539	185,313
" canned	cases	5,793	28,394	555	3,585
" -liver oil, medicinal	gal.	84,596	65,046	51,651	31,639
" oil	"	181,326	80,883	142,733	43,487

5.—Quantities and Values of Sea Fish and Products Marketed, calendar years 1930 and 1931—continued.

Kind of Fish or Product.		1930.		1931.	
		Quantity.	Value.	Quantity.	Value.
			$		$
Haddock, used fresh	cwt.	136,816	575,831	131,306	534,404
“ fresh fillets	“	59,357	743,924	44,189	508,019
“ canned	cases	15,123	95,014	13,612	75,094
“ smoked	cwt.	34,589	293,282	26,495	204,748
“ smoked fillets	“	4,122	48,161	1,876	19,077
“ green-salted	“	10,208	26,116	2,024	4,334
“ dried	“	13,049	55,160	4,756	14,410
“ boneless	“	1,751	14,236	443	2,790
Hake and cusk, used fresh	“	8,453	14,284	8,864	11,941
“ fresh fillets	“	8,453	76,109	5,020	33,339
“ green-salted	“	37,849	86,556	30,557	55,771
“ canned	cases	1,193	6,562	157	864
“ smoked fillets	cwt.	9,641	83,341	4,611	32,510
“ dried	“	50,900	151,033	25,387	53,321
“ boneless	“	1,867	13,681	664	4,152
Pollock, used fresh	“	8,023	16,844	2,840	7,162
“ fresh fillets	“	–	–	41	410
“ boneless	“	14	14	–	–
“ green-salted	“	6,699	15,588	9,274	24,677
“ dried	“	10,301	48,093	9,675	30,140
Whiting, used fresh	“	40	211	87	405
Catfish, fresh	“	1,886	4,571	1,588	6,803
“ fresh fillets	“	4	32	7	63
Halibut, used fresh	“	282,416	2,869,961	210,769	1,779,189
“ smoked	“	6	130	77	699
“ canned	cases	135	1,364	26	156
Flounders, brill, plaice, used fresh	cwt.	11,389	48,088	7,753	27,383
“ fresh fillets	“	11	121	44	505
“ smoked	“	–	–	6	60
Skate, used fresh	“	3,381	8,870	3,317	13,917
Soles, used fresh	“	19,069	97,619	9,023	46,632
“ fresh fillets	“	–	–	254	3,810
Herring, used fresh	cwt.	205,096	365,456	135,317	223,778
“ canned (round)	cases	2,740	11,335	2,467	9,911
“ canned (kippered)	“	–	–	400	4,000
“ smoked (round)	cwt.	74,489	263,265	60,285	148,262
“ smoked (boneless)	“	688	6,810	600	4,790
“ kippered	“	–	–	5,076	52,348
“ dry-salted	“	805,973	961,364	788,227	776,442
“ pickled	brl.	20,846	122,409	22,755	124,186
“ used as bait	“	183,915	381,524	195,979	325,765
“ fertilizer	“	102,792	83,192	104,721	74,093
“ oil	gal.	98,038	25,488	131,270	15,090
“ meal	ton	2,899	114,449	4,986	209,324
“ scales	cwt.	182	447	545	1,550
Mackerel, used fresh	cwt.	35,809	162,699	74,334	222,592
“ canned	cases	469	2,386	578	2,783
“ smoked	cwt.	131	846	3	18
“ pickled	brl.	47,354	432,088	38,419	259,484
“ fillets (salted)	“	–	–	1,268	15,573
“ used as bait	“	–	–	995	2,027
Sardines, canned	cases	244,238	979,299	202,520	810,838
“ sold fresh and salted	brl.	79,349	95,188	31,263	26,722
Pilchards, used fresh	cwt.	25	154	4,091	1,773
“ canned	cases	55,166	220,468	17,336	69,344
“ used as bait	brl.	926	2,415	1,552	3,315
“ oil	gal.	3,204,058	678,115	2,551,914	299,928
“ meal	ton	13,934	688,457	14,200	433,482
Alewives, used fresh	cwt.	15,130	24,673	22,719	31,129
“ fertilizer	brl.	1,875	937	–	–
“ salted	“	14,593	71,534	14,375	56,087
“ smoked	cwt.	1,165	4,280	2,274	6,385
“ used as bait	brl.	6,011	9,736	185	370
Bass, used fresh	cwt.	119	2,083	211	2,762
Perch, used fresh	“	1,733	15,576	1,038	4,143
Salmon, used fresh	“	310,352	2,951,304	264,397	176,887
“ canned	cases	2,223,469	13,924,037	686,697	5,219,757

5.—Quantities and Values of Sea Fish and Products Marketed, calendar years 1930 and 1931—concluded.

Kind of Fish or Product.		1930.		1931.	
		Quantity.	Value.	Quantity.	Value.
			$		$
Salmon, smoked	cwt.	1,383	20,253	249	4,912
“ dry-salted	“	116,223	292,782	386,693	793,516
“ mild cured	“	25,095	463,394	9,149	127,905
“ pickled	“	2,462	19,008	2,085	10,439
“ used as bait	“	729	2,837	1,464	2,208
“ roe	“	19,333	24,040	11,447	22,921
Shad, used fresh	“	3,909	35,351	4,509	38,950
“ salted	brl.	22	550	252	6,251
Smelts, used fresh	cwt.	58,944	796,700	67,906	620,093
Sturgeon, used fresh	“	526	7,368	300	4,091
“ caviar	lb.	–	–	100	115
Trout, used fresh	cwt.	139	2,914	53	1,295
Black cod, used fresh	“	13,414	86,705	1,111	7,171
“ dried	“	156	2,956	–	–
“ green-salted	“	51	943	310	4,652
“ smoked	“	1,584	29,979	2,173	27,698
Ling cod, used fresh	“	48,591	333,564	49,746	229,492
“ smoked	“	–	–	454	6,622
“ smoked fillets	“	–	–	111	2,900
Red cod, used fresh	“	4,248	24,577	2,735	10,937
Albacore, used fresh	“	2,666	16,761	1,561	7,566
Caplin, used fresh	brl.	3,639	9,014	6,216	13,061
Eels, used fresh	cwt.	2,474	23,235	2,216	16,219
Octopus, used fresh	“	355	2,569	233	1,156
Oulachons, used fresh	“	899	4,214	198	477
Squid, used as bait	brl.	6,572	31,374	1,713	6,114
Swordfish, used fresh	cwt.	11,933	214,806	12,629	236,617
Tom cod, used fresh	“	15,253	52,219	18,389	51,363
Mixed fish, used fresh	“	5,919	29,359	7,363	36,663
Clams and quahaugs, used fresh	brl.	19,677	57,111	33,077	82,240
“ “ canned	cases	44,708	262,358	23,177	145,374
Abalone, canned	“	350	3,500	421	4,210
“ used fresh	brl.	–	–	14	56
Cockles, used fresh	cwt.	–	–	88	211
Crabs, used fresh	“	4,539	26,276	5,068	26,521
“ canned	cases	295	3,141	204	1,693
Lobsters, in shell	cwt.	125,136	2,283,808	143,083	2,307,478
“ meat	“	392	26,370	543	28,910
“ canned	cases	139,109	2,873,796	146,338	2,673,412
“ tomalley	“	3,261	30,669	3,021	27,228
Mussels, fresh	cwt.	–	–	29	100
Oysters, used fresh	brl.	23,942	205,019	24,337	193,563
Scallops, shelled	gal.	36,707	83,699	23,392	41,201
“ canned	cases	195	1,823	44	440
Shrimps, used fresh	cwt.	1,578	20,426	1,188	15,778
Winkles, used fresh	“	578	1,108	913	1,738
Dulse, dried	“	765	10,306	483	4,278
Tongues and sounds, pickled or dried	“	1,555	5,838	1,330	5,432
Seal skins, fur	No.	2,291	13,746	1,463	7,004
“ hair	“	10,544	18,190	10,129	14,293
Porpoise skins	“	9	76	103	310
Whalebone meal	ton	273	6,775	–	–
Whale fertilizer	“	581	29,050	–	–
Seal oil	gal.	22,377	9,786	21,576	4,545
Porpoise oil	“	300	152	4,590	918
Whale oil	“	525,533	192,168	–	–
Grayfish oil	“	114,558	22,229	170,271	19,362
Fish oil, n.e.s	“	99,127	34,342	83,804	10,544
Grayfish meal	ton	899	45,165	1,010	34,869
Fish meal, n.e.s	“	3,841	238,950	11,316	217,303
Fish fertilizer	“	390	14,120	354	12,128
Fish skins and bones	cwt.	31,574	30,784	17,509	23,947
Fish offal	ton	11,055	31,059	4,850	11,182
Other products		–	46,919	–	52,276
Totals		–	**41,451,977**	–	**25,783,101**

6.—Quantities and Values of Inland Fish Marketed, calendar years 1930 and 1931.

Kind of Fish or Product.		1930.		1931.	
		Quantity.	Value.	Quantity.	Value.
			$		$
Alewives, fresh	cwt.	257	579	197	446
“ salted	brl.	104	712	70	380
Bass, fresh	cwt.	630	10,374	669	8,700
Carp, fresh	“	12,034	67,179	16,003	68,507
Catfish, fresh	“	8,954	79,829	9,942	81,310
Eels, fresh	“	13,914	123,879	17,867	109,762
Goldeyes, fresh	“	366	3,139	65	767
“ smoked	“	3,266	94,428	2,136	38,117
Herring, fresh	“	65,113	287,435	59,508	360,505
Ling	“	652	391	895	930
Maskinonge, fresh	“	147	3,975	187	4,167
Mixed fish, fresh	“	41,652	151,273	37,538	140,351
Mullets, fresh	“	13,189	23,413	3,015	8,518
Perch, fresh	“	42,029	331,073	50,377	227,593
Pickerel or doré, fresh	“	103,146	939,762	92,349	765,492
Pickerel, blue, fresh	“	59,284	420,917	54,048	178,359
Pike, fresh	“	56,464	228,905	45,452	161,674
Salmon, fresh	“	1,830	34,236	1,788	29,472
Saugers, fresh	“	8,961	62,482	18,279	74,194
Shad, fresh	“	2,023	16,573	2,947	19,366
Smelts, fresh	“	7,177	56,334	6,616	32,744
Sturgeon, fresh	“	4,451	101,607	4,209	90,752
“ caviar	lb.	3,647	3,647	3,893	3,883
Suckers	cwt.	5	15	3,418	6,257
Trout, fresh	“	69,670	1,029,065	57,367	706,227
Tullibee, fresh	“	62,016	461,676	42,792	190,368
“ smoked	“	15	400	7	53
Whitefish, fresh	“	169,747	1,818,941	156,215	1,425,311
Totals		-	**6,352,239**	-	**4,734,205**

7.—Yields of the Fisheries of Canada, Compared as to Quantity and Value, for 1930 and 1931. (“000” omitted.)

Kind of Fish or Product.	Actual Value. 1931.	Value at Prices of 1930.	Actual Value, 1930.	Increase (+) or Decrease(-).	Due to Higher (+) or Lower (−) Prices.	Due to Larger (+) or Smaller (−) Quantities.
	$	$	$	$	$	$
Salmon	7,972	10,085	17,732	− 9,760	− 2,113	− 7,647
Lobsters	5,037	5,576	5,215	− 178	− 539	+ 361
Cod	2,827	3,776	4,289	− 1,462	− 949	− 513
Herring	2,330	2,949	2,623	− 293	− 619	+ 326
Halibut	1,780	2,143	2,871	− 1,091	− 363	− 728
Whitefish	1,425	1,674	1,819	− 394	− 249	− 145
Haddock	1,363	1,385	1,852	− 489	− 22	− 467
Sardines	838	528	1,074	− 236	+ 310	− 546
Pilchards	808	1,558	1,590	− 782	− 750	− 32
Pickerel or doré	765	841	940	− 175	− 76	− 99
Trout	708	849	1,032	− 324	− 141	− 183
Smelts	653	961	853	− 200	− 308	+ 108
Mackerel	502	658	598	− 96	− 156	+ 60
Ling cod	239	343	334	− 95	− 104	+ 9
Swordfish	237	227	215	+ 22	+ 10	+ 12
Perch	232	407	347	− 115	− 175	+ 60
Clams and quahaugs	228	277	319	− 91	− 49	− 42
Oysters	194	208	205	− 11	− 14	+ 3
Hake and cusk	192	252	432	− 240	− 60	− 180
Tullibee	190	319	462	− 272	− 129	− 143
Blue pickerel	178	384	421	− 243	− 206	− 37
Pike	162	184	229	− 67	− 22	− 45
Eels	126	180	147	− 21	− 54	+ 33
Sturgeon	99	102	112	− 13	− 3	− 10
Alewives	95	106	112	− 17	− 11	− 6
Catfish	88	90	84	+ 4	− 2	+ 6
Carp	69	107	67	+ 2	− 38	+ 40
Pollock	62	78	81	− 19	− 16	− 3
Tom cod	51	63	52	− 1	− 12	+ 11
Soles	50	50	98	− 48	− —	− 48
Scallops	42	60	96	− 54	− 18	− 36
Black cod	40	43	121	− 81	− 3	− 78
Goldeyes	39	57	98	− 59	− 18	− 41
Seals	26	38	42	− 16	− 12	− 4
Other products of the fisheries	870	1,131	1,242	− 372	− 261	− 111
Totals	**30,517**	**37,689**	**47,804**	− **17,287**	− **7,172**	− **10,115**
Increase or Decrease per cent	-	-	-	− 36·2	− 15·0	− 21·2

8.—Numbers of Fish-Canning and Curing Establishments, by Provinces, 1930 and 1931.

Classification.	P.E.I.	N.S.	N.B.	Que.	B.C.	Total for Canada.
1930.	No.	No.	No.	No.	No.	No.
Lobster canneries	85	106	98	44	–	333
Salmon canneries	–	1	–	7	60	68
Clam canneries	5	6	10	–	2	23
Sardine and other fish canneries	–	6	3	–	1	10
Fish-curing establishments	5	101	48	34	46	234
Reduction plants	–	8	3	1	19	31
Totals	**95**	**228**	**162**	**86**	**128**	**699**
1931.						
Lobster canneries	87	97	103	50	–	337
Salmon canneries	–	1	–	12	35	48
Clam canneries	4	4	8	–	2	18
Sardine and other fish canneries	–	7	3	–	–	10
Fish-curing establishments	6	94	48	31	49	228
Reduction plants	–	4	3	1	13	21
Totals	**97**	**207**	**165**	**94**	**99**	**662**

9.—Values of Materials Used and of Products of Fish-Canning and Curing Establishments, 1927-31.

Material and Product.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Materials used—					
Fish	14,379,521	15,617,194	17,061,702	15,939,137	9,137,505
Salt	360,056	444,471	413,722	348,201	351,781
Containers	3,290,932	4,144,425	3,802,791	4,569,026	2,220,770
Other	334,337	372,677	218,644	225,125	210,778
Totals	**18,364,846**	**20,578,767**	**21,496,859**	**21,081,489**	**11,920,834**
Products—					
Fish marketed for consumption, fresh	7,123,490	8,275,669	9,057,253	7,639,557	5,168,401
Fish canned, cured or otherwise prepared	23,961,119	27,992,063	25,909,007	25,333,751	13,658,492
Totals	**31,084,609**	**36,267,732**	**34,966,260**	**32,973,308**	**18,826,893**

Capital and Employees.—In 1931 capital investments in the fisheries were as follows: (a) in vessels, boats, nets, weirs, traps, wharves, ice-houses, etc., used in the primary operations of capturing the fish, $26,265,001, of which $21,283,241 was invested in the sea fisheries and $4,981,760 in the inland fisheries; (b) in fish-canning and curing establishments (land, buildings, machinery, supplies on hand, cash and operating accounts), $19,085,513—grand total $45,350,514. The number of employees engaged in the primary operations of fishing was 61,832 in 1931, and in canning and curing establishments, 13,071, a total of 74,903. The total salaries and wages bill in canneries and fish-curing establishments was $3,182,875. Tables **10** and **11**, herewith, show the items included in the above totals, with comparative figures for 1930, while Table **12** analyses the salaries, wages and earnings of the employees in canneries, etc.

10.—Numbers and Capital Values of Fishing Vessels, Boats, Nets, Traps, etc., Used in the Fisheries of Canada, 1930 and 1931.

Equipment.	1930.		1931.	
	Number.	Value.	Number.	Value.
		$		$
Sea Fisheries—				
Steam trawlers	8	470,000	7	265,000
Steam fishing vessels	8	156,000	2	6,000
Sailing and gasolene vessels	1,216	7,854,044	911	3,861,639
Boats (sail and row)	14,571	539,415	14,393	468,061
Boats (gasolene)	16,737	7,475,369	17,160	6,844,808
Carrying smacks and scows	642	875,945	787	741,060
Gill nets	67,279	984,138	70,993	992,834
Salmon drift-nets	12,619	1,433,228	11,880	1,005,473
Salmon drag nets	19	10,875	29	17,300
Salmon trap nets	312	103,215	405	122,100
Trap nets, other	1,121	668,858	1,028	638,145
Oulachon nets	–	–	28	840
Smelt nets	18,482	627,629	18,656	515,737
Pound nets	73	14,600	73	12,775
Weirs	346	352,329	335	324,706
Salmon purse seines	399	767,775	242	481,200
Seines, other	3,470	422,255	783	229,850
Inshore drags	–	–	41	5,225
Tubs of trawl	20,859	306,672	21,031	287,841
Skates of gear	2,461	54,636	3,853	65,476
Otter trawl	59	15,625	4	1,100
Hand lines	63,699	153,785	64,203	148,046
Crab traps	4,870	16,930	6,080	21,430
Eel traps	416	1,847	465	1,182
Lobster traps	1,593,584	2,116,828	1,623,295	2,088,103
Lobster pounds	77	63,640	51	59,565
Oyster rakes	1,449	5,341	1,416	4,846
Scallop drags	322	9,760	303	8,969
Quahaug rakes	279	653	784	828
Oyster plant and equipment	1	21,208	1	21,208
Fishing piers and wharves	1,793	811,655	1,769	844,806
Freezers and ice-houses	603	282,680	657	249,155
Small fish and smoke-houses	6,946	917,323	6,972	930,933
Other gear	–	–	–	17,000
Total Values, Sea Fisheries	–	**27,534,258**	–	**21,283,241**
Inland Fisheries—				
Steam vessels or tugs	136	1,103,695	121	967,721
Boats (sail and row)	3,722	151,770	3,300	117,511
Boats (gasolene)	1,480	966,020	1,376	826,005
Scows	8	42,500	6	30,000
Gill nets	–	1,720,632	–	1,523,460
Seines	183	22,747	182	22,590
Pound nets	1,182	622,525	1,151	605,805
Hoop nets	887	28,767	876	27,042
Dip or roll nets	135	1,263	79	1,028
Lines	1,668	15,216	1,525	10,348
Weirs	1,169	122,269	1,240	119,475
Eel traps	80	200	60	120
Fish wheels	6	900	7	1,050
Spears	93	680	60	360
Fishing piers and wharves	483	229,275	457	188,800
Freezers and ice-houses	958	527,435	805	451,632
Small fish and smoke-houses	225	108,538	233	88,813
Total Values, Inland Fisheries	–	**5,664,432**	–	**4,981,760**
Fish-Canning and Curing Establishments[1]—				
Lobster canneries	333	1,257,185	337	1,440,407
Salmon canneries	68	17,927,102	48	8,556,187
Clam canneries	23	204,969	18	190,163
Sardine and other fish canneries	10	1,405,921	10	1,554,284
Fish-curing establishments	234	7,562,694	228	6,131,817
Reduction plants	31	2,469,736	21	1,212,655
Totals of Fish-Canning and Curing Establishments	**699**	**30,827,607**	**662**	**19,085,513**
Grand Totals, Capital Invested in Fisheries	–	**64,026,297**	–	**45,350,514**

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[1] Comprises values of land, buildings and machinery, products and supplies on hand, accounts and bills receivable, and cash.

11.—Numbers of Persons Employed in the Fisheries of Canada, 1929-31.

Employed in—	Sea Fisheries.			Inland Fisheries.		
	1929.	1930.	1931.	1929.	1930.	1931.
	No.	No.	No.	No.	No.	No.
Steam trawlers	182	142	141	-	-	-
Vessels	7,070	6,745	4,929	727	658	504
Boats	40,101	40,508	42,172	7,576	7,514	6,921
Carrying smacks	540	649	690	30	20	20
Fishing, not in boats	2,821	2,837	2,764	5,036	4,763	3,691
Totals	**50,714**	**50,881**	**50,696**	**13,369**	**12,955**	**11,136**

Employed in—	Fish-Canning and Curing Establishments.					
	1930.			1931.		
	Male.	Female.	Total.	Male.	Female.	Total.
	No.	No.	No.	No.	No.	No.
Lobster canneries	2,450	3,159	5,609	2,617	3,345	5,962
Salmon canneries	3,340	2,504	5,844	1,644	1,509	3,153
Clam canneries	100	199	299	69	173	242
Sardine and other fish canneries	183	212	395	202	179	381
Fish-curing establishments	2,810	310	3,120	2,756	352	3,108
Reduction plants	430	25	455	219	6	225
Totals	**9,313**	**6,409**	**15,722**	**7,507**	**5,564**	**13,071**
Grand Totals, All Fisheries	**73,149**	**6,409**	**79,558**	**69,339**	**5,564**	**74,903**

12.—Employees and Salaries and Wages in Fish-Canning and Curing Establishments, 1920-31.

Year.	On Salaries.		On Wages.		Contract and Piece-Workers.		Totals.	
	No.	$	No.	$	No.	$	No.	$
1920	651	759,176	13,137	3,180,701	4,711	916,413	18,499	4,856,290
1921	487	551,330	10,534	2,023,040	3,083	399,016	14,104	2,973,386
1922	614	682,535	11,848	2,358,780	4,115	600,415	16,577	3,641,730
1923	585	681,101	11,265	2,443,971	3,597	644,842	15,447	3,769,914
1924	574	755,631	10,583	2,588,717	4,379	890,413	15,536	4,234,761
1925	632	806,418	10,687	3,166,045	4,953	998,704	16,272	4,971,167
1926	546	733,760	11,579	3,807,533	5,283	1,081,544	17,408	5,622,837
1927	639	871,211	11,343	3,769,791	4,715	732,949	16,697	5,373,951
1928	630	853,800	10,579	3,539,070	4,225	868,226	15,434	5,261,096
1929	660	951,669	11,122	3,668,802	4,585	791,384	16,367	5,411,855
1930	591	918,952	9,967	3,383,902	5,164	1,023,609	15,722	5,326,463
1931	540	692,270	9,577	2,069,153	2,954	421,452	13,071	3,182,875

Trade.—For reasons already noted, the domestic consumption of fish is relatively small in Canada, and the trade depends largely upon foreign markets. From 60 to 70 p.c. of the annual catch is an average export. In the fiscal year 1932 fish worth $10,651,233 went to the United States and $5,481,301 to the United Kingdom. The most important single export is canned salmon (to Great Britain and European markets), followed closely by cod, dry-salted (to the West Indies, South America, etc.), and canned lobsters to Great Britain, the United States and France. For fresh fish, especially whitefish and lobsters, the United States is the chief market. Canadian imports of fish in the fiscal year 1932 amounted to $2,398,677. A general review of the import and export trade in fish for 31 years past is given in Table **13**, while Table **14** gives a comparative record of exports by countries during 1931 and 1932. Table **15** shows the leading items of export for the calendar years 1929-31. For a complete analysis of imports and exports, as well as of production, see the annual report "Fisheries Statistics", issued by the Dominion Bureau of Statistics.

13.—Values of Exports and Imports of Fish and Fish Products, fiscal years 1902-32.

NOTE.—In this table "Exports" include seal skins and fish oils, and "Imports" include turtles, whalebone, shells, mother of pearl, seal skins, fish oils and ambergris, in addition to fishery products as shown in Tables **12** and **13** of the External Trade chapter of this volume.

Year.	Exports, Fisheries, Domestic.	Imports of Fish for Home Consumption.		Year.	Exports, Fisheries, Domestic.	Imports of Fish for Home Consumption.	
		Dutiable.	Free.			Dutiable.	Free.
	$	$	$		$	$	$
1902	14,143,294	620,706	525,459	1918	32,602,151	1,039,585	1,884,041
1903	11,800,184	659,717	743,703	1919	37,137,072	1,054,848	2,128,970
1904	10,759,029	734,800	850,945	1920	42,227,996	2,605,379	1,446,493
1905	11,114,318	752,558	751,402	1921	33,615,119	2,416,152	1,876,303
1906	16,025,840	814,540	1,234,563	1922	29,578,392	2,172,850	996,763
1907[1]	10,362,142	735,045	924,046	1923	27,816,935	2,066,300	899,531
1908	13,867,367	838,037	1,103,649	1924	30,925,769	1,878,336	648,696
1909	13,319,664	784,176	925,173	1925	33,967,009	2,064,222	997,059
1910	15,663,162	952,522	820,183	1926	37,487,517	1,949,269	641,240
1911	15,675,544	1,175,072	820,019	1927	36,365,454	2,347,890	909,188
1912	16,704,678	1,261,096	1,148,522	1928	35,660,287	2,595,591	1,181,067
1913	16,336,721	1,608,663	910,923	1929	37,962,929	2,956,182	1,218,386
1914	20,623,560	1,558,663	773,109	1930	37,185,185	3,020,020	1,100,296
1915	19,687,068	1,155,186	701,112	1931	29,693,978	2,340,576	981,534
1916	22,377,977	895,371	695,702	1932	24,854,088	1,700,851	697,826
1917	24,889,253	1,347,511	1,128,768				

[1] Nine months.

14.—Exports of the Fisheries, the Produce of Canada, by Principal Countries, fiscal years ended Mar. 31, 1931 and 1932.

Exports to—	1931.	1932.	Exports to—	1931.	1932.
British Empire.	$	$	Foreign Countries.	$	$
United Kingdom	5,051,110	5,481,301	Belgium	245,117	234,989
Africa, South, British	121,828	147,612	Brazil	184,863	112,693
Africa, West, British	55,033	7,250	Chile	110,548	2,482
Bermuda	59,396	41,482	China	581,271	335,377
British India	51,606	23,105	Cuba	521,044	202,564
Straits Settlements	15,737	6,634	Denmark	169,030	119,850
British Guiana	104,341	66,564	France	1,144,432	682,117
Barbados	99,774	99,955	Germany	575,904	304,441
Jamaica	803,344	568,800	Italy	943,669	530,361
Trinidad and Tobago	432,255	254,397	Japan	740,173	1,167,381
Hong Kong	355,117	365,590	Mexico	22,164	7,698
Newfoundland	64,300	41,315	Netherlands	222,321	194,607
Australia	1,052,628	1,195,843	Panama	59,088	30,140
Fiji	44,029	32,191	Portugal	44,214	39,892
New Zealand	324,605	199,181	San Domingo	131,281	163,684
			Sweden	363,714	283,236
			United States	12,953,060	10,651,533
Totals, British Empire[1]	8,817,140	8,641,182	Puerto Rico	609,975	425,941
			Totals, Foreign Countries[1]	20,077,843	15,795,896
			Grand Totals, Exports[2]	**29,693,978**	**24,854,088**

[1] Include other countries. [2] Grand totals include exports of seal skins and fish oil. These amounted to $798,995 in 1931 and $417,010 in 1932, not separated by countries.

15.—Exports of the Fisheries of Canada, by Quantities and Values, calendar years 1929-31.

Classification.	1929.		1930.		1931.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Fish—		$		$		$
Alewives, salted.....cwt.	30,706	94,875	33,830	101,524	25,346	70,378
Bait fish.....ton	1,714	59,907	1,484	45,697	2,029	49,739
Clams, canned.....cwt.	12,994	204,753	9,024	137,317	1,774	23,598
Clams, fresh.....cwt.	11,522	24,067	16,842	26,561	36,772	54,235
Codfish, boneless, canned or preserved, n.o.p.....cwt.	30,909	315,975	20,767	205,749	20,035	200,642
Codfish, dried.....cwt.	514,998	4,748,472	448,399	3,774,333	374,500	2,422,723
Codfish, fresh and frozen.....cwt.	12,113	107,253	21,278	225,206	5,108	39,095
Codfish, green-salted (pickled).....cwt.	79,409	369,830	113,424	497,432	72,067	277,469
Codfish, smoked.....cwt.	12,950	168,423	11,450	148,909	5,033	57,305
Eels, fresh and frozen.....cwt.	10,173	136,987	10,954	133,657	10,786	89,414
Haddock, canned.....cwt.	207	2,837	203	2,468	300	3,838
Haddock, dried.....cwt.	26,023	180,672	23,672	151,011	13,179	70,579
Haddock, fresh and frozen.....cwt.	4,649	26,095	13,961	163,703	30,518	295,971
Haddock, smoked.....cwt.	15,476	160,005	13,928	157,364	12,148	124,400
Halibut, fresh and frozen.....cwt.	48,514	667,543	35,517	464,870	38,394	391,641
Herrings, lake, fresh and frozen.....cwt.	17,113	195,054	22,974	249,117	20,684	247,780
Herrings, sea, canned.....cwt.	9	90	2	20	1	28
Herrings, sea, dry-salted.....cwt.	1,090,267	1,948,725	925,270	1,567,974	884,354	1,145,738
Herrings, sea, fresh and frozen.....cwt.	291,446	234,979	162,721	139,463	92,104	94,110
Herrings, sea, pickled.....cwt.	46,351	177,906	52,678	191,653	33,268	114,167
Herrings, sea, smoked.....cwt.	80,849	328,905	69,054	252,938	53,844	184,885
Lobsters, canned.....cwt.	50,385	3,113,631	54,785	3,234,892	67,724	3,113,392
Lobsters, fresh.....cwt.	80,195	2,266,008	96,330	2,279,238	95,770	1,875,817
Mackerel, fresh and frozen.....cwt.	18,076	124,111	13,590	75,241	17,984	113,595
Mackerel, pickled.....cwt.	73,033	462,424	86,454	502,115	88,932	408,434
Oysters, fresh.....cwt.	6,383	60,088	4,710	40,953	4,642	41,108
Pilchards, canned.....cwt.	18,361	173,621	10,931	107,049	5,260	47,463
Pollock, hake and cusk, boneless, canned or preserved, n.o.p.....cwt.	254	1,716	91	660	25	175
Pollock, hake and cusk, dried.....cwt.	61,223	382,269	52,682	328,786	50,136	228,479
Pollock, hake and cusk, fresh and frozen.....cwt.	967	4,314	910	2,662	2,557	11,119
Pollock, hake and cusk, green-salted.....cwt.	24,325	50,498	15,482	35,405	4,807	10,820
Pollock, hake and cusk, smoked.....cwt.	100	1,000	138	1,721	–	–
Salmon, canned.....cwt.	605,053	8,865,089	457,279	6,479,255	410,307	5,909,948
Salmon, dry-salted (chum).....cwt.	89,963	315,341	144,729	395,371	424,124	750,311
Salmon, fresh and frozen.....cwt.	69,407	1,119,617	94,328	1,514,429	98,327	1,121,335
Salmon, pickled.....cwt.	22,817	536,691	22,040	426,316	16,528	209,346
Salmon, smoked.....cwt.	957	11,817	174	3,668	234	3,743
Salmon trout or lake trout, fresh and frozen.....cwt.	44,984	523,319	36,484	402,086	27,516	261,696
Sardines (little fish in oil).....cwt.	57,556	578,015	42,360	412,786	33,584	291,698
Shell fish, other, fresh.....cwt.	3,591	56,394	3,366	59,918	2,301	40,236
Smelts, fresh and frozen.....cwt.	67,583	989,916	53,292	816,121	64,094	814,917
Sturgeon, fresh and frozen.....cwt.	1,871	65,522	1,142	41,507	1,386	40,905
Swordfish, fresh and frozen.....cwt.	5,981	78,093	10,350	162,552	10,756	169,691
Tongues and sounds.....cwt.	887	9,085	900	4,010	894	2,925
Tullibee, fresh and frozen.....cwt.	87,859	723,022	63,570	514,842	31,423	183,282
Whale meat, canned or preserved, n.o.p.....cwt.	523	2,008	417	1,903	–	–
Whitefish, fresh and frozen.....cwt.	114,927	1,518,658	100,709	1,215,118	94,170	1,003,826
Other fresh water fish, fresh and frozen.....cwt.	317,365	2,748,526	283,971	2,286,320	282,435	2,003,831
Other fresh water fish, salted, dried, smoked or pickled.....cwt.	1,035	4,324	62	522	469	2,868
Other sea fish, fresh and frozen.....cwt.	6,547	55,086	7,064	68,107	3,934	39,402
Other sea fish, salted, dried, smoked or pickled.....cwt.	5,311	37,105	7,625	46,011	3,667	20,715
Other sea fish, canned or preserved, n.o.p.....cwt.	120	1,634	60	1,105	26	389
Fishery Products—						
Fish meal.....cwt.	324,451	826,260	322,666	884,430	317,252	661,468
Fish offal or refuse.....cwt.	29,395	64,772	18,590	36,596	11,685	19,741
Oils—						
Cod-liver oil.....gal.	169,457	129,911	172,423	124,260	232,420	115,244
Seal oil.....gal.	37,603	19,920	3,596	1,761	200	90
Whale oil.....gal.	541,585	220,089	309,527	112,675	68,806	13,474
Other fish oil.....gal.	2,934,461	1,098,669	2,591,177	555,247	2,211,762	284,595
Seal skins, undressed.....No.	24,146	108,532	6,924	24,993	10,118	18,398
Other articles of the fisheries.....	–	45,945	–	31,753	–	56,374
Totals, Fish and Fishery Products...	–	**37,546,393**	–	**31,869,350**	–	**25,848,585**

CHAPTER XII.—MINES AND MINERALS.[1]

An article on the geology of Canada, referring to the chief mineral-bearing areas of the Dominion, will be found at pp. 18-28 of the present edition of the Year Book. This is followed by an account of the chief discoveries and investigations of mineral-bearing ores in 1931, at pp. 29-37; similar articles for earlier years were published in previous editions. These articles furnish references to more detailed sources of information in the publications of the Dominion and Provincial Governments and in the scientific journals.

The Mines and Minerals chapter of the Year Book is divided into six sections: (1) a sketch of the administration of mineral lands and mining laws, (2) a summary of general production, (3) the industrial statistics of the mining industries, (4) production of metallic minerals, (5) production of non-metallic minerals, (6) production of clay products and structural materials.

For more detailed information on the mineral production of Canada the reader is referred to the various reports issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics.

Statistics of Mines and Minerals.—The compilation and publication of statistics of the production of mines and minerals in the Dominion is carried out by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, which works in close co-operation with the Mines Departments of the various Provincial Governments, collecting the data in collaboration with these Departments. Questionnaires sent out to the mining producers are designed to meet the requirements of both the Dominion and the provincial authorities, thus eliminating duplication of labour.

Annual and Monthly Statistical Reports.—Detailed statistics of the mineral production of the Dominion are published annually in a comprehensive report of over 300 pages which includes tables of Dominion-wide production, capital invested in the mining industry, number of employees, salaries and wages, fuel and machinery used in mining, together with tables showing imports and exports of minerals and their products, and a résumé of general mining conditions. The latest of these reports available for distribution at the time of writing covers the calendar year 1931 and may be obtained from the Dominion Statistician on request.

A summarized report on mineral production giving fairly detailed preliminary figures for the preceding calendar year is issued about March 15 of each year, and the salient points are reviewed at the Annual Meeting of the Canadian Institute of Mining and Metallurgy held in the first week of April. (The 1932 report is now available.) Further, a bulletin issued each year at the beginning of January gives the most accurate estimate then possible for the mineral production of the year just closed. In addition to the above, annual bulletins giving the detailed production of each mineral are issued as soon as the final figures become available in each case.

Monthly statistics of the physical production of 16 of the leading minerals of Canada have been compiled for the past four years and are published separately in monthly bulletins. These figures indicate the current trend of activity in mining operations.

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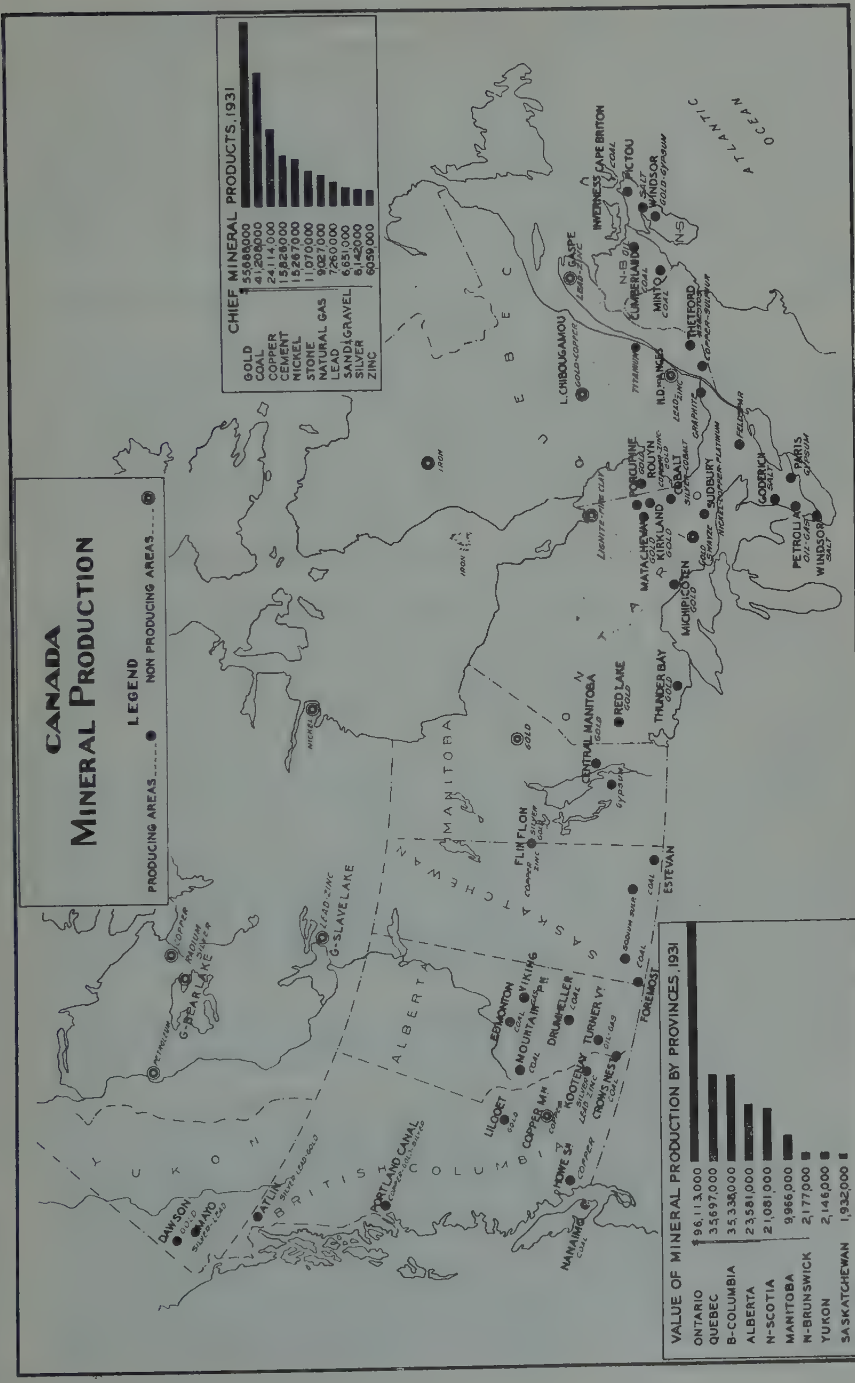
[1] Revised by W. H. Losee, B.Sc., Chief of the Mining, Metallurgical and Chemical Branch, Dominion Bureau of Statistics. A complete list of the publications of this Branch appears in Chapter XXIX, Section 1, under "Production".


CANADA
MINERAL PRODUCTION
LEGEND
PRODUCING AREAS
NON PRODUCING AREAS
CHIEF MINERAL PRODUCTS, 1931
GOLD 55,688,000
COAL 41,208,000
COPPER 24,114,000
CEMENT 15,826,000
NICKEL 15,267,000
STONE 11,070,000
NATURAL GAS 9,027,000
LEAD 7,260,000
SAND & GRAVEL 6,651,000
SILVER 6,142,000
ZINC 6,059,000
VALUE OF MINERAL PRODUCTION BY PROVINCES, 1931
ONTARIO 96,113,000
QUEBEC 35,697,000
B-COLUMBIA 35,338,000
ALBERTA 23,581,000
N-SCOTIA 21,081,000
MANITOBA 9,966,000
N-BRUNSWICK 2,177,000
YUKON 2,146,000
SASKATCHEWAN 1,932,000
YUKON
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
N-B
N-S
ATLANTIC OCEAN
DAWSON GOLD
MAYO SILVER-LEAD
ATLIN SILVER LEAD GOLD
PORTLAND CANAL COPPER GOLD SILVER
LILLOOET GOLD
COPPER MT. COPPER
HOWE SD. COPPER
NANAIMO COAL
KOOTENAY SILVER LEAD ZINC
CROWS NEST COAL
EDMONTON COAL
MOUNTAIN PK. COAL
VIKING GAS
DRUMHELLER COAL
TURNER V. OIL-GAS
FOREMOST
COAL
SODIUM SULP.
ESTEVAN COAL
PETROLEUM
G-BEAR LAKE RADIUM SILVER
COPPER
G-SLAVE LAKE LEAD-ZINC
FLIN FLON COPPER SILVER GOLD ZINC
CENTRAL MANITOBA GOLD
GYPSUM
GOLD
NICKEL
RED LAKE GOLD
THUNDER BAY GOLD
MICHIPICOTEN GOLD
MATACHEWAN GOLD
KIRKLAND GOLD
PORCUPINE GOLD
ROUYN COPPER-ZINC-GOLD
COBALT SILVER-COBALT
SUDBURY NICKEL-COPPER-PLATINUM
SWAYZE GOLD
GODERICH SALT
PETROLIA OIL-GAS
WINDSOR SALT
PARIS GYPSUM
FELDSPAR
GRAPHITE
LEAD-ZINC
N.D. MINES
TITANIUM
L. CHIBOUGAMOU GOLD-COPPER
LIGNITE-FIRE CLAY
IRON
GASPE LEAD-ZINC
THETFORD ASBESTOS
COPPER-SULPHUR
MINTO COAL
CUMBERLAND COAL
N-B OIL
INVERNESS
CAPE BRITON COAL
PICTOU
SALT
WINDSOR GOLD-GYPSUM

VALUE OF MINERAL PRODUCTION BY PRODUCTS AND PROVINCES

Coal Statistics.—Coal is perhaps the most important of all minerals, from the point of view of the general public. This special position is recognized in the statistics by the publication of an annual report on Coal Statistics, giving complete details of coal-mining operations in the various coal-producing provinces and showing the imports and exports of coal by kinds and by ports of entry and exit, together with industrial statistics in relation to coal mining. Monthly bulletins and quarterly reports on coal and coke statistics are also issued, giving coal and coke production and imports and exports, the quarterly printed reports showing in detailed form production of coal by areas, and imports and exports by ports of entry and exit.

Section 1.—Mineral Lands Administration and Mining Laws.

The mineral lands of Canada, like other Crown lands, are administered by either the Dominion or the Provincial Governments. The Dominion Government administers the mineral lands of Yukon and the Northwest Territories as well as those in all Indian Reserves, and in National Parks in the Prairie Provinces and British Columbia. Since the transfer of the natural resources to the Prairie Provinces in 1930, all other mineral lands lying within the boundaries of the several provinces are administered by the respective Provincial Governments.

Subsection 1.—Dominion Mining Laws and Regulations.

Dominion lands to which these regulations apply are those administered by the Department of the Interior, and lie within Yukon and the Northwest Territories. Titles issued for Dominion lands, the property of the Dominion Government in the territories of Canada, reserve to the Crown the mines and minerals which may be found on or under such lands, together with the right of operation.

Placer.—Claims 500 feet long and from 1,000 to 2,000 feet wide, according to location, may be staked out and acquired by any person 18 years of age or over. Claims to be marked by two legal posts, one at each end, and the line joining them marked. Creek claims are staked along the base line of the creek, and extend 1,000 feet on each side. River claims are 500 feet on one side of the river and extend back 1,000 feet. Other claims are staked parallel to the creek or river on which they front, 500 feet long by 1,000 feet. Expenditure in development of each claim to be incurred and proved each year, $200 in Yukon and $100 elsewhere. Royalty 2½ p.c.

Quartz.—"Mineral" under this heading means all deposits of metals and other useful minerals other than placer deposits, peat, coal, petroleum, natural gas, bitumen and oil shales.

Under the new regulations, effective April 2, 1932, applicable to the Northwest Territories, any prospector or locator of a mineral claim, whether an individual, mining partnership or a company must hold a miner's licence, the fee being $5 for an individual, from $5 to $20 for mining partnerships, and larger amounts proportionate to their capitalization for mining companies. A licensee may stake out 6 claims on his own licence and 12 more for two other licensees, not exceeding 18 in all in any one licence year in any mining division. A mineral claim shall be rectangular and marked by a post at each corner—maximum area 51·65 acres, being 1,500 feet square. Entry is granted by mining recorder, fee $5 for a claim located by a licensee on his own licence, and $10 if located on behalf of another licensee. Grant is renewable from year to year, subject to representation work being done on the location each year to the value of $100. When prescribed representation work has been done and confirmed, discovery of mineral in place shown to have been made, a survey made by a Dominion land surveyor at grantee's expense and certain other requirements met, a lease is issued for a term of 21 years, renewable, the rental for the full term being $50. The cost of the survey, reckoned as $100, may be counted as work done on the claim. A maximum of 36 claims may be grouped for purposes of representation work. When the profits of a mine exceed $10,000 in any calendar year, there is a royalty of from 3 to 6 p.c. or higher, proportionate to profits. Miners' licences are not required in Yukon under the Yukon Quartz Mining Act, but the general provisions of the Act are similar to those of the Quartz Mining Regulations above, except that the fee for a grant is $10 and only 8 mineral claims can be grouped for operation.

In addition to these Quartz and Placer Mining Regulations applicable to the Northwest Territories and the Yukon Quartz and Placer Mining Acts, the following regulations regarding minerals are in force: *Yukon.*—Dredging Regulations; Petroleum and Natural Gas Regulations.—*Yukon and Northwest Territories.*—Alkali Mining Regulations; Carbon-Black Regulations; Coal Mining Regulations; Potash Regulations and Domestic Coal Permits.—*Northwest Territories.*—Dredging Regulations; Oil and Gas Regulations; Quarrying Regulations and Permits to remove sand, stone and gravel from beds of rivers.

For copies of any of the regulations above referred to, application may be made to the Dominion Lands Administration, Department of the Interior, Ottawa.

Subsection 2.—Provincial Mining Laws and Regulations.

Nova Scotia.—All minerals in Nova Scotia, except limestone, gypsum and building materials, are the property of the Crown. They are dealt with under the provisions of the Mines Act (c. 22, R.S.N.S., 1923) and amending Acts of 1927 (c. 17) and 1929 (c. 22), and are administered by the Minister of Public Works and Mines, at whose office in the Parliament Buildings, Halifax, all records of mining titles are kept.

The chief mineral product of Nova Scotia is coal, which is subject to a royalty of 12½ cents per long ton. Coal used in mining operations, or used for domestic purposes by workmen employed about the mine, is exempted from royalty. Other important minerals of Nova Scotia are gold, salt, lead, zinc, copper, diatomaceous earth, manganese, antimony, gypsum and limestone.

Licences to search for mineral, good for a year, are issued at a nominal fee. More permanent holding is obtained by lease, which, in the case of minerals other than gold and silver, is granted for 20 years (subject to payment of an annual rental and the performance of work), the lease carrying the right to three successive renewals of 20 years each. A lease for gold and silver is given for 40 years, subject to a small annual rental and performance of work.

Full information concerning minerals and mining laws may be obtained by writing the Department of Public Works and Mines at the above address.

New Brunswick.—In grants of Crown land with few exceptions since about the year 1805, all mines and minerals are reserved to the Crown and regarded as property separate from the soil. Prior to that time, most of the grants reserved only gold, silver, copper, lead and coal. Royalties levied are 10 cents per long ton on coal and 5 p.c. on the value at the well's mouth for petroleum and natural gas.

Prospectors must obtain a licence costing $10 and good for the calendar year. It entitles the prospector to stake up to 10 claims of 40 acres each. Claims must be registered within 30 days and 25 days' work done on each claim within the year, after which a mining licence, renewable annually on the payment of $10 per claim, will be granted. Administration is carried on under the provisions of the Mining Act (c. 35, R.S.N.B., 1927). For full information apply to the Department of Lands and Mines, Fredericton, N.B.

Quebec.—The mining lands of Quebec are administered by the Minister of Mines, subject to the provisions of the Quebec Mining Act (c. 80, R.S.Q., 1925) and amendments.

In townships the Crown retains full mining rights on lands granted subsequently to July 24, 1880, and, in the case of gold and silver, on lands granted previous to that date. All mining rights belong to the Crown in most of the seigneuries.

Mining lands up to 200 acres in extent can be acquired by staking the ground as prescribed by the Mining Act. Claims must be recorded and 25 days' work per claim done within 12 months, when a mining licence is granted upon payment of 50 cents an acre and a recording fee of $10. The licence is renewable annually. When a mineral occurrence of importance has been found, the mining rights can be purchased as a mining concession for $5 per acre for superior minerals and $3 per acre for inferior minerals.

Mining operators must make annual returns to the Minister. Taxes are payable on annual profits at rates graduated up from 3 p.c. A mining inspector is appointed in each mining division for the administration of the mining laws and regulations.

Information and statistics on mining operations and geological explorations are to be found in the Annual Report of the Quebec Bureau of Mines.

Ontario.—Ontario owns and administers for mining purposes, through her Department of Mines, all the Crown lands within her boundaries except Indian lands. Mining lands are subject to the provisions of the Mining Act (c. 45, R.S.O., 1927). Title is a grant in fee simple, except in provincial forests, where the lands are leased. A resident mining recorder is appointed for each mining division created in the mineral areas. There is a tax on mining lands in unorganized territory of 5c. per acre per annum. Other taxation is on the net profits, the rate being 3 p.c. up to $1,000,000; 5 p.c. from $1,000,000 to $5,000,000 and 6 p.c. on the excess above $5,000,000. The first $10,000 of profit is exempt. There is no apex law, all claim boundaries extending vertically downwards. Disputes are settled by the Recorder, or, on appeal, by the judge of the Mining Court of Ontario.

A miner's licence is necessary to stake out or acquire Crown lands for mining purposes, fee $5 per year for an individual; for companies, $100 on each million dollars capital. The holder may stake out for himself three claims in any and every mining division, and six additional for other licence holders, but not more than three for any such other licensee. A mining claim in unsurveyed territory is a square of 20 chains to a side (40 acres) with lines N.-S. and E.-W. astronomically. Where land is subdivided into lots a claim may be an eighth, a quarter or a half lot, *i.e.*, up to 50 acres.

There are special provisions regarding petroleum, natural gas, coal and salt on the James Bay slope, where these substances may be searched for under authority of a boring permit. A total of 1,920 acres may be taken up by an individual in blocks of 640 acres. Certain areas have been withdrawn from staking.

Full information concerning the mineral resources of the province and the mining laws may be obtained by writing the Department of Mines, Parliament Buildings, Toronto, Ontario.

Manitoba.—With the transfer of the natural resources to the province of Manitoba on July 15, 1930, control of most of the public lands passed to the Department of Mines and Natural Resources of the Manitoba Government.

The Mines Act (c. 27, 1930) and regulations thereunder govern the administration and leasing of: (1) Mineral claims—gold, silver, copper, zinc, etc.; (2) Boring permits—coal, natural gas, oil shale, petroleum and salt; (3) Quarrying locations—granite, limestone, marble, slate or any building stone, gypsum, gravel, marl, peat and sand.

A miner's licence is necessary to stake out Crown lands for mining purposes; fee is $5 for an individual and larger amounts for mining partnerships and mining companies. A licensee may stake out for himself three mineral claims and six more for two other licensees, not exceeding nine in all in any mining division. He may also obtain one boring permit or one quarrying location.

A mineral claim in unsurveyed territory is a square of 1,500 feet (51·65 acres) with lines N.-S. and E.-W. astronomically. A boring permit allows 640 acres to be taken up and a quarrying location may cover an area up to 40 acres. The fee is $5 for recording a claim located by the licensee and $10 if recorded on behalf of another licensee. After recording, 25 days' work per claim must be done per year for 5 years. A maximum of nine claims may be grouped for the purpose of this work. When 125 days' work has been done, and certain other requirements complied with, a lease is granted. The cost of the survey may be reckoned as one year's work done on the claim.

A boring permit good for one year is necessary to search for oil, coal, gas or salt. If mineral is discovered a 21-year lease may be obtained subject to annual rental and certain annual work.

Lands containing granite, limestone, marble, slate or any building stone, together with clay, gravel, gypsum or sand may be leased at an annual rental, provided $2.50 per acre per annum be expended in taking out the material.

For a copy of the regulations governing the disposal of mineral rights, apply to the Director, Mines Branch, Department of Mines and Natural Resources, Winnipeg, Manitoba. Mining recorders' offices are located at Winnipeg and The Pas.

Saskatchewan.—On Oct. 1, 1930, the province of Saskatchewan came into control of its natural resources, which had previously been controlled and administered by the Dominion. By the Mineral Resources Act of 1931, regulations, differing somewhat from those of former Dominion laws, have been brought into force dealing with coal, petroleum and natural gas, and placer. Except for these changes, the regulations are similar to the former Dominion ones.

Coal.—The area which may be taken is now from 40 to 640 acres. Application may be made by mail or in person and any eligible person may apply for three locations. The length of a location must not exceed three times the breadth. The minimum required to be mined annually is 5 tons per acre. Prior to commencing, a lessee must secure a permit to operate.

Petroleum and Natural Gas.—Application for locations may be made by mail or in person. The area of a location may be 160 to 1,920 acres but, while one applicant is allowed three locations, the total area must not exceed 1,920 acres. A permit must be obtained before commencing operations and all drillers must secure a licence of competency to ensure that drilling will be efficiently carried out. The record of a driller may be obtained by payment of a fee. Operators are required to furnish a substantial bond to guarantee compliance with the regulations.

Permits to prospect for oil and gas are granted under similar regulations except that a cash rental of 20 cents per acre is required and a bond of 30 cents per acre which is forfeited if work to determine structure is not carried out within one year.

Placer.—These regulations remain as under Dominion administration except that 30 instead of 10 adjoining claims may now be grouped.

The Saskatchewan Mines Act provides for the competency of mine managers and pit bosses, for the reporting of accidents and generally for the welfare and safety of those employed in the production of minerals.

For further information apply to the Department of Natural Resources, Regina, Saskatchewan.

Alberta.—Since the Dominion Government in 1930 transferred control of the natural resources lying within the boundaries of Alberta to the Provincial Government, the leasing or disposal of mineral lands or rights is administered under provincial laws and regulations. However, for the present, mineral lands or rights within the province are being administered by the Provincial Government in accordance with the Dominion mining laws and regulations in force at the time of the transfer.

The Coal Mines Regulation Act of the province of Alberta and regulations made thereunder make provision for the safe operation of mines in the province, applying to mines of coal, ironstone, shale, clay and other minerals. Operations must be under the control of officials who hold certificates granted after suitable examination. A staff of inspectors is provided to administer the regulations. Monthly reports of operations must be returned to the Minister.

The Coal Sales Act requires that all coal mines shall be registered by name and all coal produced in Alberta sold under the registered name. The Coal Miners' Wages Security Act requires all coal operators to provide bond to insure the payment of wages, unless exemption is obtained through the Board of Public Utility Commissioners.

British Columbia.—The Department of Mines, organized under the provisions of c. 163, R.S.B.C., and amendments, administers mineral lands, and has charge of all matters relating to mining, including the Bureau of Mines and all offices established under the Bureau of Mines Act and all Government offices in connection with the mining industry.

The terms of the mining laws are favourable to the prospector, fees and rentals being small. On a lode mine of 51 acres an expenditure of $500 in work, which may be spread over 5 years, is required to obtain a Crown grant, while surface rights are obtainable at a figure in no case exceeding $5 per acre. Any person over the age of 18 and any joint stock company can obtain a "free miner's certificate" on payment of a fee, which for the individual is $5 per annum and for a joint stock company either $50 or $100 per annum depending on capitalization. Mineral claims located under the provisions of the Mineral Act must not exceed 1,500 feet square.

Placer.—Placer mining is governed by the Placer Mining Act and, by the interpretation clause, its scope is defined as "the mining of any natural stratum or bed of earth, gravel, or cement mined for gold or other precious minerals or stones".

Placer Claims.—Placer claims are of 3 classes, as follows: (1) Creek diggings—250 feet long and 1,000 feet wide, 500 feet on each side of the stream; (2) Bar diggings—250 feet square on a bar covered at high water, or a strip 250 feet long at high water, extending between high-water mark and extreme low-water mark; (3) Dry diggings, over which water never extends—250 feet square.

A placer claim must be worked by the owner, or someone on his behalf, continuously during working hours. Discontinuance for 72 hours, except in close season, lay-over, leave of absence, sickness or other reason satisfactory to the Gold Commissioner is deemed abandonment. To hold a placer claim more than one year, it must be again recorded before expiration of the year.

Placer Leases.—Leases of unoccupied Crown lands may be granted by the Gold Commissioner of the district. Placer leases are of 4 classes, as follows:—(1) Creek lease—on rivers or on abandoned or unworked creeks, half a mile in length; annual rental, $37.50; annual expenditure required on development, $250. (2) Bench lease—80 acres; annual rental, $25; annual expenditure required on development, $250. (3) Dredging lease—on the bed of any river below low-water mark, 5 miles; annual rental, $25 per mile; annual expenditure required on development, $1,000 per mile; the value of any new plant or machinery employed to count as money expended in development. (4) Precious stone diggings—10 acres.

Section 2.—Summary of General Production.

Since 1886, the first year that the Geological Survey issued complete returns of mineral production, Canada has shown a fairly steady growth in mineral output. In that year the per capita production was only $2.23; in 1901, five years after the Yukon discoveries, production totalled $12.16 per capita, but there was a falling-off from 1902 to 1904. Thereafter, owing to the discovery of silver in the Cobalt area, the development of the copper and nickel ores of the Sudbury district, the opening up of the gold mines of Porcupine and Kirkland Lake in Ontario, the improvements in metallurgical practice which led to the recoveries of large quantities of lead and zinc from British Columbian ores, and the discoveries and developments in Quebec and Manitoba, the per capita production rose to $31 in 1929, although owing to the current depression it has since dropped to $17.35 in 1932.

In 1931, the latest year for which the world figures of the Imperial Institute are available, Canada stood first in the production of asbestos and nickel, second in the output of gold, zinc and cobalt, third in silver and copper, fourth in lead, and eleventh in the production of coal. During that year Canada produced 83 p.c. of the world production of nickel, 57 p.c. of the asbestos, 33·4 p.c. of the cobalt, 15·5 p.c. of the zinc, 12·6 p.c. of the gold, 10·6 p.c. of the silver, 9·6 p.c. of the copper and 8·9 p.c. of the lead.

The annual preliminary survey of the Canadian mining industry shows a total estimated valuation of $182,320,150 for 1932; this is a decrease of 20 p.c. from 1931, reflecting the prolonged and intensified economic depression that has spread over the world in the last three years. Producers of base metals and structural materials were adversely affected by record-breaking low prices for metals combined with an extraordinary decline of industrial activities.

In contrast to the severe reductions in most mineral outputs was the pronounced increase of gold from Canadian mines. The 1932 gold production constituted a new high record for the Dominion and for the third consecutive year established Canada in the position of the second gold-producing country in the world. Since the suspension of specie payments by Great Britain in September, 1931, there has been a heavy discount on the Canadian dollar in New York. This continues to react to the benefit of the Canadian gold producer. In order to facilitate the meeting of maturing obligations abroad the Canadian Government, in October, 1931, arranged for the purchase of Canadian gold produced after that date.

Field activity during 1932 was chiefly concentrated in the search for new gold deposits. In Ontario the recent gold discoveries of the Swayze area were extensively explored, while in Quebec various new gold properties were developed in the Rouyn area, including the new Cadillac-O'Brien and Bussières mines, which have commenced production. One gold mine in Ontario and one in Manitoba were also brought into production—the Ashley mine located in the Matachewan area of Ontario and the San Antonio situated in the Rice Lake area of Manitoba. British Columbia experienced a wide-spread search for gold properties and alluvial gold production was increased. In the Northwest Territories commercial shipments of silver-radium ores were made for the first time from the deposits of these metals discovered at Great Bear Lake in 1930.

Subsection 1.—General Statistics of Mineral Production.

In Table **1** will be found the total values of the minerals produced in Canada in each year since 1886, while Table **2** gives the details of the mineral production of 1930 and 1931, with the percentage of increase or decrease in the latter year.

1.—Value of Mineral Production in Canada, calendar years 1886-1932.

Calendar Year.	Total Value.	Value per capita.	Calendar Year.	Total Value.	Value per capita.	Calendar Year.	Total Value.	Value per capita.
	$	$		$	$		$	$
1886.........	10,221,255	2·23	1902.....	63,231,836	11·51	1918.....	211,301,897	25·93
1887.........	10,321,331	2·23	1903.....	61,740,513	10·90	1919.....	176,686,390	21·26
1888.........	12,518,894	2·67	1904.....	60,082,771	10·31	1920.....	227,859,665	26·63
1889.........	14,013,113	2·96	1905.....	69,078,999	11·51	1921.....	171,923,342	19·56
1890.........	16,763,353	3·51	1906.....	79,286,697	12·86	1922.....	184,297,242	20·66
1891.........	18,976,616	3·93	1907.....	86,865,202	13·55	1923.....	214,079,331	23·76
1892.........	16,623,415	3·40	1908.....	85,557,101	12·92	1924.....	209,583,406	22·92
1893.........	20,035,082	4·06	1909.....	91,831,441	13·50	1925.....	226,583,333	24·38
1894.........	19,931,158	4·00	1910.....	106,823,623	15·29	1926.....	240,437,123	25·44
1895.........	20,505,917	4·08	1911.....	103,220,994	14·32	1927.....	247,356,695	25·67
1896.........	22,474,256	4·42	1912.....	135,048,296	18·28	1928.....	274,989,487	27·97
1897.........	28,485,023	5·56	1913.....	145,634,812	19·08	1929.....	310,850,246	31·00
1898.........	38,412,431	7·42	1914.....	128,863,075	16·36	1930.....	279,873,578	27·42
1899.........	49,234,005	9·41	1915.....	137,109,171	17·18	1931.....	228,029,018	21·97
1900.........	64,420,877	12·15	1916.....	177,201,534	22·15	1932[1].....	182,320,150	17·35
1901.........	65,797,911	12·25	1917.....	189,646,821	23·53			

[1] Subject to revision.

2.—Mineral Production of Canada, calendar years 1930 and 1931.

Item.	1930.		1931.		P.C. Increase (+) or Decrease (−).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		$		$	p.c.	p.c.
METALLIC.						
Arsenic (As_2O_3) lb.	4,524,220	129,527	3,575,936	135,170	−21·0	+4·4
Bismuth “	12,732	6,366	118,207	157,650	−	−
Cadmium $	−	337,871	−	180,958	−	−46·4
Cobalt “	694,163	1,144,007	521,051	651,179	−24·9	−43·1
Copper “	303,478,356	37,948,359	292,304,390	24,114,065	− 3·7	−36·5
Gold fine oz.	2,102,068	43,453,601	2,693,892	55,687,688	+28·2	+28·2
Lead lb.	332,894,163	13,102,635	267,342,482	7,260,183	−19·7	−44·6
Manganese ore tons	273	1,356	117	2,893	−57·1	+113·3
Molybdenite (concentrates) lb.	−	−	1,222	280	−	−
Nickel “	103,768,857	24,455,133	65,666,320	15,267,453	−36·7	−37·6
Palladium, rhodium, iridium, etc fine oz.	34,092	895,867	46,918	1,217,717	+37·6	+35·9
Platinum “	34,024	1,543,261	44,775	1,596,900	+31·6	+ 3·5
Selenium lb.	−	−	21,500	40,850	−	−
Silver fine oz.	26,443,823	10,089,376	20,562,247	6,141,943	−22·2	−39·1
Titanium ore tons	412	1,239	1,509	10,261	+266·3	+728·2
Zinc lb.	267,643,505	9,635,166	237,245,451	6,059,249	−11·4	−37·1
Totals, Metallic Minerals $	−	**142,743,764**	−	**118,524,439**	−	**−17·0**
NON-METALLIC.						
Fuels.						
Coal tons	14,881,324	52,849,748	12,243,211	41,207,682	−17·7	−22·0
Natural gas M cu. ft.	29,376,919	10,289,985	25,874,723	9,026,754	−11·9	−12·3
Peat tons	2,847	10,932	1,674	7,033	−41·2	−35·7
Petroleum, crude brl.	1,522,220	5,033,820	1,542,573	4,211,674	+ 1·3	−16·3
Totals, Fuels... $	−	68,184,485	−	54,453,143	−	−20·1
Other Non-Metallic Minerals.						
Actinolite tons	34	437	35	456	+ 2·9	+ 4·3
Asbestos “	242,114	8,390,163	164,296	4,812,886	−32·1	−42·6
Barytes “	66	1,484	16	363	−75·8	−75·5
Bituminous sands “	2,067	8,268	1,015	4,060	−50·9	−50·9
Diatomite “	554	13,247	1,610	32,789	+190·6	+147·5
Feldspar “	26,796	268,469	18,343	186,961	−31·5	−30·4
Fluorspar “	80	1,240	40	620	−50·0	−50·0
Graphite “	1,535	96,392	548	32,149	−64·3	−66·6
Grindstones “	830	62,021	621	38,103	−25·2	−38·6
Gypsum “	1,070,968	2,818,788	863,752	2,111,517	−19·3	−25·1
Iron oxides “	6,596	83,873	5,520	49,205	−16·3	−41·3
Magnesite “	13,336	336,162	11,411	295,579	−14·4	−12·1
Manganese, bog “	275	1,650	77	462	−72·0	−72·0
Mica “	1,170	96,004	1,339	54,066	+14·4	−43·7
Mineral water gal.	227,141	24,481	217,408	13,324	− 4·3	−45·6
Phosphate tons	40	760	−	−	−	−
Quartz “	226,200	418,127	195,724	303,158	−13·5	−27·5
Salt “	271,695	1,694,631	259,047	1,904,149	− 4·7	+12·4
Silica brick M	2,418	97,379	900	35,746	−62·8	−63·3
Soapstone	−	50,168	−	34,439	−	−31·4
Sodium carbonate tons	364	4,550	712	7,351	+95·6	+61·6
Sodium sulphate	−	293,847	−	421,097	−	+43·3
Sulphur[1] tons	37,730	314,835	50,107	429,457	+32·8	+36·4
Talc “	11,841	136,048	11,836	122,644	−0·04	− 9·9
Volcanic dust “	242	4,840	128	2,560	−47·1	−47·1
Totals, Other Non-Metallic Minerals. $	−	15,217,864	−	10,893,141	−	−28·4
Totals, Non-Metallic Minerals $	−	**83,402,349**	−	**65,346,284**	−	**−21·6**

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[1] Includes sulphur content of pyrites at its sale value and estimated figures for quantity and value of sulphur in smelter gases used for acid making.

2.—Mineral Production of Canada, calendar years 1930 and 1931—concluded.

Item.	1930.		1931.		P.C. Increase (+) or Decrease (−).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		$		$	p.c.	p.c.
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
Clay Products.						
Brick—						
Soft mud process—						
Face.............. M	11,350	247,220	5,476	116,316	−51·8	−53·0
Common......... M	56,487	861,805	41,177	619,357	−27·1	−28·1
Stiff mud process— (wire cut)						
Face.............. M	99,284	2,135,871	77,135	1,752,947	−22·3	−17·9
Common......... M	105,225	1,480,965	81,930	1,205,464	−22·1	−18·6
Dry press—						
Face.............. M	29,434	604,197	20,149	423,357	−31·5	−29·9
Common......... M	16,915	208,495	8,688	107,213	−48·6	−48·6
Fancy or ornamental brick............. M	339	27,649	335	20,773	− 1·2	−24·9
Sewer brick......... M	804	15,299	2,253	43,692	+180·2	+185·6
Paving brick........ M	9	297	19	682	+111·1	+129·6
Firebrick........... M	3,789	177,608	2,248	107,597	−40·7	−39·4
Fire clay.............. tons	2,870	25,975	1,233	14,857	−57·0	−42·8
Bentonite............. "	74	1,396	187	935	+152·7	−33·0
Fire clay blocks and shapes	−	147,309	−	83,039	−	−43·6
Hollow blocks........ tons	165,359	1,667,783	105,635	1,046,634	−36·1	−37·2
Roofing tile........... No.	3,056	356	6,935	720	+126·9	+102·2
Floor tile (quarries)..sq. ft.	179,786	56,230	107,499	31,415	−40·2	−44·1
Drain tile............. M	25,291	687,070	12,518	328,410	−50·5	−52·2
Sewer pipe, copings, flue linings, etc...........	−	1,721,815	−	1,508,803	−	−12·4
Pottery, glazed and unglazed	−	294,866	−	257,125	−	−12·8
Other clay products.........	−	231,372	−	171,952	−	−25·7
Totals, Clay Products..$	−	10,593,578	−	7,841,288	−	−26·0
Other Structural Materials.						
Cement............... brl.	11,032,538	17,713,067	10,161,658	15,826,243	− 7·9	−10·7
Lime.................. tons	490,802	4,038,698	344,785	2,764,415	−29·8	−31·6
Sand and gravel....... "	28,547,511	8,344,913	21,748,586	6,651,165	−23·8	−20·3
Slate.................. "	150	3,000	250	5,000	+66·7	+66·7
Stone.................. "	9,994,506	13,034,209	8,397,860	11,070,184	−16·0	−15·1
Totals, Other Structural Materials............$	−	43,133,887	−	36,317,007	−	−15·8
Totals, Clay Products and Other Structural Materials..................$	−	**53,727,465**	−	**44,158,295**	−	−17·8
Grand Totals........$	−	**279,873,578**	−	**228,029,018**	−	−18·5

An interesting comparison of the mineral production of the two years, 1930 and 1931, as to quantities and values, is furnished in Table **3**.

The percentage increase or decrease in quantity production of individual minerals is shown in Table **2** above, but owing to the many different units in which the quantity of different minerals is expressed the total volume of production from year to year is difficult to compare, while the wide variations in prices make comparisons of total values misleading. Table **3** is an attempt to overcome these difficulties by working out what the values would be in the later year if prices had remained the same as in the earlier, thus obtaining the increases or decreases due to changes in quantity alone; these are shown in the last column. Thus, of a total decrease of 18·5 p.c. in the value of mineral production from 1930 to 1931, declining prices accounted for 8·7 p.c., while decreased quantities accounted for 9·8 p.c. In the metallic group decreased production amounted to only 2·7 p.c.; in fuels to 15·5 p.c.; in other non-metallics to 22·5 p.c.; in clay products to 27·4 p.c.; and in other structural materials to 15·4 p.c.

3.—Mineral Production of Canada, Compared as to Quantity and Value, calendar years 1930 and 1931 ("000" omitted).

Item.	Actual Value 1931.	Value at Prices of 1930.	Actual Value 1930.	Actual Increase (+) or Decrease (−).	Due to Higher (+) or Lower (−) Prices.	Due to Larger (+) or Smaller (−) Quantities.
	$	$	$	$	$	$
METALLIC.						
Arsenic	135	102	130	+ 5	+ 33	− 28
Bismuth	158	59	6	+ 152	+ 99	+ 53
Cadmium	181	212	338	− 157	− 31	− 126
Cobalt	651	858	1,144	− 493	− 207	− 286
Copper	24,114	36,560	37,948	− 13,834	− 12,446	− 1,388
Gold	55,688	55,688	43,454	+ 12,234	−	+ 12,234
Lead	7,260	10,518	13,103	− 5,843	− 3,258	− 2,585
Nickel	15,267	15,480	24,455	− 9,188	− 213	− 8,975
Palladium, rhodium, etc.	1,218	970	896	+ 322	+ 248	+ 74
Platinum	1,597	2,030	1,543	+ 54	− 433	+ 487
Selenium	41	41	−	+ 41	−	+ 41
Silver	6,142	7,840	10,089	− 3,947	− 1,698	− 2,249
Zinc	6,059	8,542	9,635	− 3,576	− 2,483	− 1,093
Other metallics	13	5	3	+ 10	+ 8	+ 2
Totals, Metallic Minerals	**118,524**	**138,905**	**142,744**	**− 24,220**	**− 20,381**	**− 3,839**
NON-METALLIC.						
Fuels.						
Coal	41,208	43,460	52,849	− 11,641	− 2,252	− 9,389
Natural gas	9,027	9,065	10,290	− 1,263	− 38	− 1,225
Petroleum, crude	4,212	5,100	5,034	− 822	− 888	+ 66
Peat	7	6	11	− 4	+ 1	− 5
Totals, Fuels	**54,454**	**57,631**	**68,184**	**− 13,730**	**− 3,177**	**− 10,553**
Other Non-Metallic Minerals.						
Asbestos	4,813	5,696	8,390	− 3,577	− 883	− 2,694
Diatomite	33	38	13	+ 20	− 5	+ 25
Feldspar	187	184	268	− 81	+ 3	− 84
Graphite	32	34	96	− 64	− 2	− 62
Grindstones	38	46	62	− 24	− 8	− 16
Gypsum	2,112	2,270	2,819	− 707	− 158	− 549
Iron oxides	49	70	84	− 35	− 21	− 14
Magnesite	296	288	336	− 40	+ 8	− 48
Mica	54	110	96	− 42	− 56	+ 14
Mineral water	13	23	25	− 12	− 10	− 2
Quartz	303	362	418	− 115	− 59	− 56
Salt	1,904	1,615	1,695	+ 209	+ 289	− 80
Silica brick	36	36	97	− 61	−	− 61
Soapstone	34	38	50	− 16	− 4	− 12
Sodium sulphate	421	419	294	+ 127	+ 2	+ 125
Sulphur	429	418	315	+ 114	+ 11	+ 103
Talc	123	136	136	− 13	− 13	−
Other non-metallics	16	17	24	− 8	− 1	− 7
Totals, Other Non-Metallic Minerals	**10,893**	**11,800**	**15,218**	**− 4,325**	**− 907**	**− 3,418**

3.—Mineral Production of Canada, Compared as to Quantity and Value, calendar years 1930 and 1931 ("000" omitted)—concluded.

Item.	Actual Value 1931.	Value at Prices of 1930.	Actual Value 1930.	Actual Increase (+) or Decrease (−).	Due to Higher (+) or Lower (−) Prices.	Due to Larger (+) or Smaller (−) Quantities.
	$	$	$	$	$	$
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
Clay Products.						
Brick—Soft mud process Face	116	119	247	− 131	− 3	− 128
Brick—Soft mud process Common	619	628	862	− 243	− 9	− 234
Stiff mud process (wire cut) Face	1,753	1,659	2,136	− 383	+ 94	− 477
Stiff mud process (wire cut) Common	1,206	1,153	1,481	− 275	+ 53	− 328
Dry press Face	423	414	604	− 181	+ 9	− 190
Dry press Common	107	107	209	− 102	-	− 102
Fancy or ornamental	21	27	28	− 7	− 6	− 1
Sewer brick	44	43	15	+ 29	+ 1	+ 28
Fire brick	108	105	178	− 70	+ 3	− 73
Fireclay blocks, etc	83	81	147	− 64	+ 2	− 66
Hollow blocks	1,047	1,066	1,668	− 621	− 19	− 602
Floor tile	31	34	56	− 25	− 3	− 22
Drain tile	328	340	687	− 359	− 12	− 347
Sewer pipe, copings, etc	1,509	1,481	1,722	− 213	+ 28	− 241
Pottery, glazed or not	257	252	295	− 38	+ 5	− 43
Other clay products	189	185	259	− 70	+ 4	− 74
Totals, Clay Products	**7,841**	**7,694**	**10,594**	− **2,753**	+ **147**	− **2,900**
Other Structural Materials.						
Cement	15,826	16,330	17,713	− 1,887	− 504	− 1,383
Lime	2,765	2,838	4,039	− 1,274	− 73	− 1,201
Sand and gravel	6,651	6,360	8,345	− 1,694	+ 291	− 1,985
Stone	11,075	10,955	13,037	− 1,962	+ 120	− 2,082
Totals, Other Structural Materials	**36,317**	**36,483**	**43,134**	− **6,817**	− **166**	− **6,651**
Grand Totals	**228,029**	**252,513**	**279,874**	− **51,845**	− **24,484**	− **27,361**
Increase or Decrease, p.c.	-	-	-	− 18·5	− 8·7	− 9·8

Subsection 2.—Provincial Distribution of Mineral Production.

The principal mineral-producing province of Canada in 1931 was Ontario, with an output valued at $96,113,235. Ontario took the leading position with the development of the Cobalt camp in 1907. British Columbia, which prior to that time was the leading mineral province, continued in second position until 1931 when its production was slightly exceeded by that of Quebec, largely owing to developments in the new northwestern district of that province. Alberta and Nova Scotia, because of their large resources of coal, are also important mineral producers, while in recent years valuable deposits of metallic minerals have been developed in Manitoba. The record of the respective provinces from 1899 is given in Table 4.

4.—Mineral Production of Canada, by Provinces, calendar years 1899-1932.

Calendar Year.	Nova Scotia.[1]	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Yukon.[2]	British Columbia.
	$	$	$	$	$				$
1899...	6,817,274	420,227	2,585,635	9,819,557	17,108,707				12,482,605
1900...	9,298,479	439,060	3,292,383	11,258,099	23,452,230				16,680,526
1901...	7,770,159	467,985	3,759,984	13,970,010	19,297,940				20,531,833
1902...	10,686,549	607,129	3,743,636	14,619,091	16,127,400				17,448,031
1903...	11,431,914	580,495	3,585,938	14,160,033	14,082,986				17,899,147
1904...	11,212.746	559,913	3,688,482	12,582,843	12,713,613				19,325,174
1905...	11,507.047	559,035	4,405,975	18,833,292	11,387,642				22,386,008
1906...	12,894,303	646,328	5,242,058	25,111,682	10,092,726				25,299,600
1907...	14,532,040	664.467	6,205,553	30,381,638	898,775	533,251	4,657,524	3,335,898	25,656,056
1908 ..	14,487.108	579,816	6,372,949	30,623,812	584,374	413,212	5,122,505	3,669,290	23,704,035
1909...	12,504,810	657.035	7,086,265	37,374,577	1,193,377	456,246	6,047,447	4,032,678	22,479,006
1910...	14,195,730	581,942	8,270,136	43,538,078	1,500,359	498,122	8,996,210	4,764,474	24,478,572
1911...	15,409,397	612,830	9,304,717	42,796,162	1,791,772	636,706	6,662,673	4,707,432	21,299.305
1912...	18,922,236	771,004	11,656,998	51,985,876	2,463,074	1,165,642	12,073,589	5,933,242	30,076,635
1913...	19,376,183	1,102,613	13,475,534	59,167,749	2,214,496	881,142	15,054,046	6,276,737	28,086,312
1914...	17,584,639	1,014,570	11,836,929	53,034,677	2,413,489	712,313	12,684,234	5,418,185	24,164,039
1915...	18,088,342	903,467	11,619,275	61,071,287	1,318,387	451,933	9,909,347	5,057,708	28,689,425
1916...	20.042,262	1,118,187	14,406,598	80,461,323	1,823,576	590,473	13,297,543	5,491,610	39,969,962
1917...	21,104,542	1,435,024	17,400,077	89,066.600	2,628,264	860,651	16,527,535	4,482,202	36,141,926
1918...	22,317,108	2,144,017	19,605,347	94,694,093	3,120,600	1,019,781	23,109,987	2,355,631	42,935,333
1919...	23,445,215	1,770,945	21,267,947	67,917,998	2,868,378	1,521,964	21,087,582	1,940,934	34,865,427
1920...	34,130,017	2,491,787	28,886,214	81,715,808	4,223,461	1,837,468	33,586,456	1,576,726	39,411,728
1921...	28,912,111	1,901,505	15,157,094	57,356,651	1,934,117	1,114,220	30,562,229	1,754,955	33,230,460
1922...	25,923,499	2,263,692	17,646,529	65,866,029	2,258,942	1,255,470	27,872,136	1,785,573	39,423,962
1923...	29,648,893	2,462.457	20,308.763	80,825,851	1,768,037	1,047,583	31,287.536	2,972,823	43,757,388
1924...	23,820,352	1,969.260	19,136,504	86,398,656	1,534,249	1,128.100	22,344,940	952,812	52,298,533
1925...	17,625,612	1,743,858	24,284,527	87,980,436	2,276,759	1,076,392	25,318,866	1,791,641	64,485,242
1926...	28,873,792	1,811,104	25,956,193	84,702,296	3,073,528	1,193,394	26,977,027	2,226,813	65,622,976
1927...	30,111,221	2,148,535	28,870,403	89,982,962	2,888,912	1,455,225	29,309,223	1,789,044	60,801,170
1928...	30,524,392	2,198,919	37,037,420	99,584,718	4,186,853	1,719,461	32,531,416	2,709,957	64,496,351
1929...	30,904,453	2,439,072	46,358,285	117,662,505	5,423,825	2,253,506	34,739,986	2,905,736	68,162.878
1930...	27,019,367	2,383,571	41,215,220	113,530,976	5,453,182	2,368,612	30,427,742	2,521,588	54,953,320
1931...	21,080,746	2,176,910	35,696.563	96,113,235	9,965,854	1,931,880	23,580,727	2,145,347	35,337,756
1932[3]..	16,234,882	2,243,879	24,369,246	79,239,578	8,695,961	1,625.167	21,163,727	1,891,713	26,855,997

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[1] Includes a small production from Prince Edward Island.

[2] Includes a small production from the Northwest Territories in 1932.

[3] Figures for 1932 are subject to revision.

The quantities and values of the minerals produced in each province during 1931 are shown in Table **5**. Coal accounted for 90 p.c. of the value of mineral production in Nova Scotia, with gypsum the item of next importance. Coal and gypsum were likewise the most important mineral products of New Brunswick, which was also one of the provinces with a production of natural gas and petroleum. Quebec was the only province in which asbestos was produced. In 1929 this was her principal mineral, but since then asbestos production has been much curtailed. In 1931 cement was the chief mineral product, followed by gold, stone and copper and Quebec led all the provinces in the value of cement and stone produced. Gold represented 45 p.c. of the value of Ontario's mineral production in 1931 and with other metals, of which nickel, copper, silver, the platinoids and cobalt were the chief, made up 76 p.c. of the total for the province. As the most populous province, Ontario had a large production of the various structural materials, and there was also a large production of natural gas, salt and gypsum. Cement and other structural materials were, until recently, the principal mineral products of Manitoba, but developments in the Precambrian formations of the north and east of this province have made it an important producer of metals. Copper and gold were the chief minerals in 1931, while there was also production of zinc, silver, cement and gypsum. Saskatchewan's mineral production was small and coal constituted about half the total, the remainder being sodium sulphate and structural materials. Coal was the principal product in Alberta, accounting for 55 p.c. of the total, while natural gas, petroleum and cement were the other most important products. The metals, chiefly lead, copper, zinc, gold and silver, made up the greater part of the value of the minerals produced in British Columbia, although owing to the great decline in the prices of most of these metals in 1931, coal became the leading mineral product in point of value for the province. Silver, alluvial gold and lead were the principal mineral products of Yukon.

5.—Mineral Production of Canada, by Provinces, calendar year 1931.

NOTE.—The mineral production of Yukon during the calendar year 1931 was as follows in quantities and values:—Gold, 44,310 fine oz., $915,969; Lead, 4,454,613 lb., $120,724; Silver, 3,694,728 fine oz., $1,103,615; Coal, 904 tons, $5,039; Total, $2,145,347.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
METALLICS.								
Arsenic.............. lb.	–	–	–	3,575,936	–	–	–	–
$	–	–	–	135,170	–	–	–	–
Bismuth............ lb.	–	–	–	7,331	–	–	–	110,876
$	–	–	–	3,532	–	–	–	154,118
Cadmium........... $	–	–	–	–	–	–	–	180,958
Cobalt.............. lb.	–	–	–	521,051	–	–	–	–
$	–	–	–	651,179	–	–	–	–
Copper.............. lb.	–	–	68,376,985	112,882,625	45,821,432	–	–	65,223,348
$	–	–	5,723,154	9,096,463	3,835,254	–	–	5,459,194
Gold...........fine oz.	460	–	300,075	2,085,814	102,969	–	195	160,069
$	9,509	–	6,203,101	43,117,600	2,128,558	–	4,031	3,308,920
Lead................ lb.	–	–	–	985,633	–	–	–	261,902,236
$	–	–	–	41,647	–	–	–	7,097,812
Manganese ore.......tons	60	57	–	–	–	–	–	–
$	2,400	493	–	–	–	–	–	–
Molybdenite (concentrates)......... lb.	–	–	–	1,222	–	–	–	–
$	–	–	–	280	–	–	–	–
Nickel.............. lb.	–	–	–	65,666,320	–	–	–	–
$	–	–	–	15,267,453	–	–	–	–
Palladium, rhodium, etc........fine oz.	–	–	–	46,918	–	–	–	–
$	–	–	–	1,217,717	–	–	–	–
Platinum........fine oz.	–	–	–	44,725	–	–	–	50
$	–	–	–	1,595,117	–	–	–	1,783
Selenium............ lb.	–	–	–	16,899	3,870	–	–	731
$	–	–	–	32,108	7,353	–	–	1,389
Silver...........fine oz.	48	–	530,345	7,438,951	836,547	–	29	8,061,599
$	14	–	158,414	2,222,014	249,877	–	9	2,408,000
Titanium ore........tons	–	–	1,509	–	–	–	–	–
$	–	–	10,261	–	–	–	–	–
Zinc................. lb.	–	–	–	–	35,173,749	–	–	202,071,702
$	–	–	–	–	898,338	–	–	5,160,911
Totals, Metallics.. $	**11,923**	**493**	**12,094,930**	**73,380,280**	**7,119,380**	**–**	**4,040**	**23,773,085**
NON-METALLICS.								
Fuels.								
Coal.................tons	4,955,563	182,181	–	–	1,306	662,836	4,564,015	1,876,406
$	19,016,720	743,196	–	–	3,797	945,259	13,342,675	7,150,996
Natural gas......M cu. ft.	–	655,891	–	7,419,534	600	–	17,798,698	–
$	–	323,184	–	4,635,497	180	–	4,067,893	–
Peat.................tons	–	–	1,170	504	–	–	–	–
$	–	–	5,937	1,096	–	–	–	–
Petroleum, crude.... brl.	–	6,577	–	122,365	–	–	1,413,631	–
$	–	15,461	–	219,993	–	–	3,976,220	–
Totals, Fuels..... $	**19,016,720**	**1,081,841**	**5,937**	**4,856,586**	**3,977**	**945,259**	**21,386,788**	**7,150,996**

5.—Mineral Production of Canada, by Provinces, calendar year 1931—continued.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
NON-METALLICS-con.								
Other Non-Metallics.								
Actinolite..........tons	-	-	-	35	-	-	-	-
$	-	-	-	456	-	-	-	-
Asbestos..........tons	-	-	164,296	-	-	-	-	-
$	-	-	4,812,886	-	-	-	-	-
Barytes..........tons	16	-	-	-	-	-	-	-
$	363	-	-	-	-	-	-	-
Bituminous sands....tons	-	-	-	-	-	-	1,015	-
$	-	-	-	-	-	-	4,060	-
Diatomite..........tons	1,484	-	-	60	-	-	-	66
$	29,679	-	-	840	-	-	-	2,270
Feldspar..........tons	-	-	10,381	7,962	-	-	-	-
$	-	-	86,842	100,119	-	-	-	-
Fluorspar..........tons	-	-	-	40	-	-	-	-
$	-	-	-	620	-	-	-	-
Graphite..........tons	-	-	-	548	-	-	-	-
$	-	-	-	32,149	-	-	-	-
Grindstones..........tons	-	299	-	-	-	-	-	322
$	-	12,308	-	-	-	-	-	25,795
Gypsum..........tons	707,817	58,957	-	53,358	23,076	-	-	20,544
$	878,487	451,264	-	374,469	231,124	-	-	176,173
Iron oxides..........tons	-	-	5,410	-	-	-	-	110
$	-	-	48,205	-	-	-	-	1,000
Magnesite..........tons	-	-	11,411	-	-	-	-	-
$	-	-	295,579	-	-	-	-	-
Manganese (bog).....tons	-	77	-	-	-	-	-	-
$	-	462	-	-	-	-	-	-
Mica..........tons	-	-	290	1,049	-	-	-	-
$	-	-	30,601	23,465	-	-	-	-
Mineral water..Imp. gal.	-	-	19,868	197,540	-	-	-	-
$	-	-	4,746	8,578	-	-	-	-
Quartz..........tons	3,116	-	26,987	97,888	67,214	-	-	519
$	6,836	-	69,759	148,642	76,624	-	-	1,297
Salt..........tons	27,718	-	-	231,329	-	-	-	-
$	143,761	-	-	1,760,388	-	-	-	-
Silica brick.......... M	621	-	-	279	-	-	-	-
$	22,044	-	-	13,702	-	-	-	-
Soapstone.......... $	-	-	34,439	-	-	-	-	-
Sodium carbonate...tons	-	-	-	-	-	-	-	712
$	-	-	-	-	-	-	-	7,351
Sodium sulphate.... $	-	-	-	-	-	421,097	-	-
Sulphur[1]..........tons	-	-	14,586	6,508	-	-	-	29,013
$	-	-	108,617	65,080	-	-	-	255,760
Talc..........tons	-	-	-	11,806	-	-	-	30
$	-	-	-	122,044	-	-	-	600
Volcanic dust........tons	-	-	-	-	-	128	-	-
$	-	-	-	-	-	2,560	-	-
Totals, Other Non-Metallics........ $	**1,081,170**	**464,034**	**5,491,674**	**2,650,552**	**307,748**	**423,657**	**4,060**	**470,246**
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.								
Clay Products.								
Brick—								
Soft mud process—								
Face.......... M	120	100	-	4,954	-	-	302	-
$	1,560	2,200	-	105,006	-	-	7,550	-
Common........ M	780	3,134	-	24,478	5,209	415	1,734	5,427
$	10,660	42,671	-	373,130	76,688	5,451	22,280	88,477
Stiff mud process (wire cut)—								
Face.......... M	349	910	32,113	40,935	794	576	675	783
$	9,970	25,669	766,988	873,334	17,577	20,233	12,328	26,848
Common........ M	3,728	1,778	56,464	17,008	30	1,831	379	712
$	54,573	26,311	841,868	249,880	360	18,095	3,267	11,110
Dry press—								
Face.......... M	-	-	2,894	13,991	-	27	2,779	458
$	-	-	74,970	300,614	-	720	28,937	18,116
Common........ M	-	-	250	2,719	-	-	3,797	1,922
$	-	-	2,500	39,767	-	-	36,179	28,767

5.—Mineral Production of Canada, by Provinces, calendar year 1931—concluded.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
CLAY PRODUCTS—con.								
Brick—con.								
Fancy or ornamental brick............ M	–	–	76	259	–	–	–	–
$	–	–	3,944	16,829	–	–	–	–
Sewer brick....... M	–	–	–	1,946	–	–	–	307
$	–	–	–	33,321	–	–	–	10,371
Paving brick...... M	–	–	–	–	–	–	–	19
$	–	–	–	–	–	–	–	682
Firebrick.......... M	7	–	–	–	–	415	24	1,802
$	240	–	–	–	–	24,568	1,193	81,596
Fireclay............tons	65	48	–	–	–	484	–	636
$	650	1,930	–	–	–	3,915	–	8,362
Bentonite...........tons	–	–	–	–	–	–	–	187
$	–	–	–	–	–	–	–	935
Fireclay blocks and shapes............ $	825	535	–	–	–	63,603	–	18,076
Hollow blocks.......tons	7,372	1,776	41,585	41,774	1,278	3,177	5,360	3,313
$	86,632	16,706	477,720	346,079	15,703	28,299	42,276	33,219
Roofing tile..........No.	–	–	–	6,935	–	–	–	–
$	–	–	–	720	–	–	–	–
Floor tiles (quarries) sq. ft.	–	–	–	107,418	–	81	–	–
$	–	–	–	31,395	–	20	–	–
Drain tile........... M	159	3	696	10,210	248	–	55	1,147
$	6,611	127	24,864	244,368	12,300	–	1,721	38,419
Sewer pipe, copings, flue linings, etc.... $	295,405	–	168,054	696,964	–	–	227,305	121,075
Pottery, glazed or unglazed.......... $	–	27,199	–	73,860	–	1,031	146,502	8,533
Other clay products. $	–	–	–	167,533	–	322	178	3,919
Totals, Clay Products.......... $	**467,126**	**143,348**	**2,360,908**	**3,552,800**	**122,628**	**166,257**	**529,716**	**498,505**
Other Structural Materials.								
Cement.............brl.	–	–	4,942,323	3,470,056	544,160	–	626,483	578,636
$	–	–	7,092,895	5,006,826	1,267,893	–	1,286,080	1,172,549
Lime................tons	18,430	11,241	111,496	147,660	21,014	–	5,118	29,826
$	79,418	127,054	804,218	1,222,270	207,401	–	46,785	277,269
Sand and gravel.....tons	403,858	183,475	7,657,964	7,465,017	871,986	1,388,594	1,050,988	2,726,704
$	198,757	18,149	1,952,959	2,562,477	294,178	396,707	313,616	914,322
Slate................tons	–	–	–	–	–	–	–	250
$	–	–	–	–	–	–	–	5,000
Stone................tons	83,181	62,325	4,265,529	3,359,364	153,248	–	2,496	471,717
$	225,632	341,991	5,893,042	2,881,444	642,649	–	9,642	1,075,784
Totals, Other Structural Materials. $	**503,807**	**487,194**	**15,743,114**	**11,673,017**	**2,412,121**	**396,707**	**1,656,123**	**3,444,924**
Grand Totals.... $	**21,080,746**	**2,176,910**	**35,696,563**	**96,113,235**	**9,965,854**	**1,931,880**	**23,580,727**	**35,337,756**

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[1] Sulphur content of pyrites at its sale value and estimated quantity and value of sulphur contained in the sulphuric acid made from smelter gases.

Section 3.—Industrial Statistics of Mines and Minerals—Capital, Labour, Wages, etc., in Principal Industries.

Annual statistical reports on the mineral production of Canada have been published for many years, first by the Geological Survey, later by the Mines Branch of the Department of Mines, and since 1921 by the Dominion Bureau of Statistics. Prior to that year the annual statistics of mines were confined chiefly to a presentation of the quantity production of each of the minerals and their value at average market prices for the year. The recent treatment has been extended to include a general review of the principal mineral industries, such as the copper-gold, silver-lead-zinc and nickel-copper industries, as well as a section on metallurgical works. The additional data include such features as capital employed, numbers of employees, wages and salaries paid, and gross and net production. The aim has been to extend the mining statistics beyond a summary of the production of individual minerals by approaching the subject from the standpoint of industrial organization, definitely illustrating the place which mining holds in the scheme of Canadian productive enterprise.

The net value of the products of the mines, smelters, quarries, sand and gravel pits, oil and gas wells, clay products plants, cement mills and other mineral industries should not be confused with the figures given as the value of mineral production. The values produced by the metallic industries given in Tables **6** and **7** are those reported by the operating companies, and are in each case the settlements received for shipments by mine operators and the additional value obtained when the smelting of these ores is completed in Canada. The totals indicate more nearly the actual return to the different industries than do the values for the several metals in Table **2** of this chapter, where, in the cases of copper, lead, zinc and silver, the values are computed by using the average prices for the year in the principal metal markets. Furthermore, the production figures of Table **2** include all quantities shipped from the mines, while metals absorbed in new metallurgical operations or remaining in stock at smelters and refineries are not included in the industrial figures of Tables **6** and **7**. On the other hand, some imported ores and concentrates are treated in Canadian non-ferrous smelting and refining works. The net value of the products of these plants includes, therefore, the net value of the metals recovered from these imported ores and to this extent the net sales shown in Tables **6** and **7** include products not of Canadian origin. Furthermore, the value of gold production is computed at the standard rate of $20·671834 per fine oz. (Table **9**), while the actual return to the industries includes the premiums on gold as well. For these reasons the industrial returns differ from the total of production and, while occasionally smaller as in 1930, are usually larger as in 1931.

The total net value of products of the fuel industries in Table **7** is less than the total production of fuels in Table **2**, because the net value of products of the industries is confined to that for which the operators receive some economic return, while the production of the fuel commodities includes all of those commodities produced, whether the producer actually receives payment in any form for them or not. Thus in coal mining, the industrial values in Table **7** include only coal sold, supplied to employees for domestic consumption, or used in making coke and briquettes, whereas the figures of coal production as shown in Table **2** include, in addition to the above, coal consumed for power and other purposes in the coal-mining operations and also the difference between coal put on the bank and lifted from the bank. Petroleum producers have a larger monetary return than the actual value of the petroleum produced because many oil wells also produce large quantities of natural gas. On the other hand, the natural gas industry receives a smaller return than the total value of all natural gas produced because some of the gas is produced by the petroleum industry, because of leakage or other loss in piping gas to the consumers, and because a small amount of natural gas is produced by private individuals or groups from their own wells for their own consumption, without any industrial organization intervening between producer and consumer.

For other non-metallic minerals (if the small production of peat normally included with fuels is deducted) and clay products, and structural materials, returns to the producing industries are the same in each case as the total value of the mineral commodities produced.

The Growth of the Mining Industry in Recent Years.—Annual publication of industrial statistics of the mining industry, showing capital employed, the number of employees, the salaries and wages paid, the cost of fuel and electricity, and the net value of the products did not commence until 1921. In connection with the item of capital, operators were requested to report *only the capital actually invested in the enterprises,* including (1) cost of lands, buildings, plant, machinery and tools, (2) cost of materials on hand, supplies, finished products and ore on dump, and (3) cash, trading and operating accounts and bills receivable. It should be specially noted that no estimate of undeveloped ores was included in the capital.

The substantial growth of the mining industry in Canada during the post-war decade is established by the summary statistics of Table **6.** From 1922 to 1929—a period of slowly declining prices—the output increased by 72 p.c., capital investment by 76 p.c., employment by 53 p.c., and the salaries and wages paid by 65 p.c. Progress was most rapid in the metallic mineral industries, where the expansion in net production amounted to 170 p.c. with proportionate increases in capital and employment. The period from 1922 to 1929 was marked by a rising cycle of activity in construction. This is reflected in the expansion of industries engaged in the production of clay products and other structural materials. The output of this group of industries increased by 47 p.c. during the period, while within the group progress was much greater in industries producing cement, gravel and stone than in the clay products industries. The group of non-metallic mineral industries remained relatively stationary in contrast to the other two main groups during this period of rapid expansion. This may be attributed to the fact that coal mining is the predominant industry in the non-metallic group and, under increasing competition from oil fuels and hydro-electric power, did not participate in the general industrial expansion of the period.

Under the influence of the world-wide depression, there has naturally been a recession in the mineral industries generally. As was to be expected, the decline since 1929 has affected the reported capital (3 p.c. lower) much less than employment (23 p.c. lower), output (24 p.c. lower) or salaries and wages (26 p.c. lower). The non-metallic mineral industries appear to have suffered most in spite of the fact that they participated so little in the previous expansion. Their salaries and wages and their net sales dropped to a lower point in 1931 than at any time during the years shown. The mineral industries producing various structural materials in 1931 still had a wage bill and an output larger than in 1926. The price decline in these materials was not severe and demand for them was somewhat maintained by some large construction enterprises and by public works' programs, road improvements and so forth. The metallic mineral industries, although showing the greatest expansion up to 1929, had declined the least from that point in 1931. Their salaries and wages and net sales were still above the 1927 level in spite of the drastic declines in the prices of a number of the metals. A number of the industries within this group have been helped by the relative rise in the value of gold. However, the figures are strong evidence that Canada's metal-producing industries have been established upon a solid foundation since, after so rapid an expansion, they have been able to withstand so well the shock of the depression.

6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1921-31, and by Provinces, 1931.

Group and Year.	Firms.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity.	Net Sales.[1]
METALLIC MINERALS.	No.	$	No.	$	$	$
1921	378	200,007,449	12,133	16,232,998	3,914,615[2]	48,133,974
1922	408	165,975,343	13,138	18,361,667	1,649,856[2]	60,347,043
1923	339	240,889,284	16,472	25,794,032	7,904,820	68,612,936
1924	296	281,828,285	19,809	29,692,896	7,788,506	86,825,610
1925	323	290,534,965	20,664	32,732,782	8,721,063	105,700,838
1926	396	320,248,840	23,742	36,033,798	10,023,885	115,939,119
1927	479	335,708,206	26,343	40,284,887	10,411,397	121,062,811
1928	508	435,327,646	28,582	44,687,131	9,756,573	140,770,772
1929	485	427,498,173	31,125	50,279,511	11,221,987	163,050,366
1930	325	427,439,265	30,633	48,851,303	11,323,313	136,994,693
1931	312	390,908,034	25,434	41,829,288	10,340,523	132,382,514
NON-METALLIC MINERALS.						
1921	718	265,701,593	37,713	52,292,357	4,881,440[2]	87,842,682
1922	742	232,888,769	37,958	45,225,900	4,028,784[2]	82,976,794
1923	925	243,105,227	39,060	53,428,264	6,422,352	91,936,732
1924	935	259,360,944	33,831	41,933,916	5,788,085	71,796,009
1925	959	253,023,646	31,560	40,032,918	5,685,294	71,851,801
1926	967	274,109,129	36,166	44,379,854	6,535,609	85,240,144
1927	922	279,737,591	37,949	48,273,491	5,402,897	85,205,431
1928	862	295,725,531	39,086	54,089,011	5,824,098	89,312,961
1929	873	317,302,496	40,080	55,602,313	6,033,773	93,596,188
1930	901	328,776,596	38,355	47,852,675	5,785,483	80,063,355
1931	843	325,168,359	34,075	36,031,233	4,870,674	61,629,210
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
1921	657	93,805,112	10,958	10,636,285	5,489,127[2]	34,737,428
1922	794	94,830,711	11,153	11,438,934	5,417,924[2]	39,534,741
1923	1,031	94,842,501	11,420	12,112,581	6,930,164	37,751,381
1924	983	91,254,717	10,688	11,160,609	6,010,861	35,380,869
1925	1,072	88,516,534	12,866	12,337,418	6,159,443	37,649,234
1926	1,064	94,392,039	18,023	13,803,161	6,958,810	39,959,398
1927	949	98,627,203	20,382	15,662,514	7,145,990	44,809,419
1928	975	110,914,805	21,780	17,177,880	7,851,330	49,737,181
1929	1,028	122,220,364	23,897	18,608,687	9,495,825	58,534,834
1930	1,252	131,204,998	20,222	17,271,354	7,957,397	53,727,465
1931	1,242	125,983,627	13,300	14,108,778	6,298,151	44,158,295
Grand Totals, Mineral Industries—						
1921	**1,741**	**559,514,154**	**60,804**	**79,161,640**	**14,285,182**[2]	**170,714,084**
1922	**1,944**	**493,694,823**	**62,249**	**75,026,501**	**11,096,564**[2]	**182,858,578**
1923	**2,295**	**578,837,012**	**66,952**	**91,334,877**	**21,257,336**	**198,301,049**
1924	**2,214**	**632,443,946**	**64,328**	**82,787,421**	**19,587,452**	**194,002,488**
1925	**2,354**	**632,075,145**	**65,090**	**85,103,118**	**20,565,800**	**215,201,873**
1926	**2,427**	**688,750,008**	**77,931**	**94,216,813**	**23,518,304**	**241,138,661**
1927	**2,350**	**714,073,000**	**84,674**	**104,220,892**	**22,960,284**	**251,077,661**
1928	**2,345**	**841,967,982**	**89,448**	**115,954,022**	**23,432,001**	**279,820,914**
1929	**2,386**	**867,021,033**	**95,102**	**124,490,511**	**26,751,585**	**315,181,388**
1930	**2,478**	**887,420,859**	**89,200**	**113,975,332**	**25,066,193**	**270,785,513**
1931 –Canada	**2,397**	**842,060,020**	**72,809**	**91,969,299**	**21,509,348**	**238,170,019**
Nova Scotia	69	63,853,580	14,871	15,302,444	2,020,666	19,258,296
New Brunswick	52	5,543,570	1,197	1,048,860	163,893	2,137,832
Quebec	452	146,067,130	11,141	12,666,586	5,607,812	44,064,907
Ontario	1,014	305,883,585	20,277	30,470,475	7,508,844	98,509,571
Manitoba	51	39,113,921	2,059	3,096,332	796,076	15,122,432
Saskatchewan	76	7,136,859	1,092	896,131	222,526	1,876,284
Alberta	401	141,629,189	10,579	11,357,722	1,198,890	23,021,495
British Columbia	276	127,009,722	11,297	16,345,887	3,874,529	31,925,780
Yukon	6	5,822,464	296	784,862	116,112	2,253,422

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[1] Gross value less freight and treatment charges and less value of ores charged in the case of smelters.

[2] Electricity was not included in 1921 and 1922.

A summary of the principal statistics of the mining, metallurgical, clay products and other structural materials industries operating in Canada in 1930 and 1931 is presented in Table **7.** Of these industries, coal mining provided the largest employment and paid the largest wage bill, with auriferous quartz second and non-ferrous metal smelting and refining third. In the amount of capital invested the smelting industry was highest, with coal mining second and auriferous quartz third. In net sales smelting led again, with auriferous quartz a very close second, coal mining third, copper-gold-silver fourth, cement fifth, and the stone industry sixth.

The only mineral industries to show increased returns in 1931 over 1930 were: alluvial gold, auriferous quartz, copper-gold-silver, salt, and miscellaneous non-metallics (due chiefly to an increase in sodium sulphate). Important industries which showed the most pronounced falling off were: silver-cobalt, silver-lead-zinc, and asbestos, all of which declined by from 43 p.c. to 51 p.c.

7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1930 and 1931.

Industry and Year.	Firms.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity.	Net Sales.[1]
	No.	$	No.	$	$	$
METALLIC MINERALS.						
Alluvial gold 1930	79	5,881,620	394	612,369	8,272	877,778
1931	109	5,908,001	337	682,935	41,745	1,226,541
Auriferous quartz 1930	54	119,758,057	8,401	14,034,620	2,364,102	39,777.739
1931	68	109,933,164	9,636	16,467,165	2,700,326	49,144,578
Copper-gold-silver 1930	61	45,844,395	5,694	9,156,759	1,272,262	15,629,564
1931	53	37,127,920	3,351	4,958,317	726,502	15,951,103
Silver-cobalt 1930	23	12,268,322	1,043	1,488,591	352,844	3,637,181
1931	22	9,352,520	786	1,149,689	227,467	1,925,593
Silver-lead-zinc 1930	86	42,053,674	2,866	4,263,961	654,685	13,000,815
1931	39	31,152,078	1,299	2,149,921	485,106	6,351,975
Nickel-copper 1930	2	26,194,605	3,483	5,388,783	200,151	8,460,556
1931	3	21,320,977	2,133	3,150.240	105,403	7,539,836
Miscellaneous metals 1930	10	427,906	116	110,096	5,100	2,595
1931	7	444,179	32	25,694	576	13,434
Smelting and refining 1930	10	175,010,686	8,626	13,796,124	6,465,897	55,635,664[2]
1931	11	175,669,195	7,860	13,245,327	6,053,398	50,229,454[2]
Totals, Metallic Minerals 1930	**325**	**427,439,265**	**30,623**	**48,851,303**	**11,323,313**	**136,994,693**
1931	**312**	**390,908,034**	**25,434**	**41,829,288**	**10,340,523**	**132,582,514**
NON-METALLIC MINERALS.						
Fuels.						
Coal 1930	390	140,316,395	29,172	36,442,361	3,595,416	49,905,327
1931	412	135,712,866	27,860	28,802,428	3,060,487	37,762,927
Natural gas 1930	124	70,548,353	1,941	2,349,703	33,811	8,447,385
1931	145	71,085,678	1,692	2,072,022	26,921	8,232,822
Petroleum 1930	234	63,300,244	1,869	3,337,754	363,998	6,481,847
1931	160	57,620,950	1,209	1,634,517	303,511	4,733,287
Totals, Fuels 1930	748	274,164,992	32,982	42,129,818	3,993,225	64,834,559
1931	717	264,419,494	30,761	32,508,967	3,390,919	50,729,036
Other Non-Metallic Minerals.						
Abrasives (natural) 1930	10	345,102	45	42,867	4,305	80,108
1931	8	569,772	31	25,837	3,906	73,452
Asbestos 1930	7	35,097,872	2,770	3,474,215	1,133,737	8,390,163
1931	7	40,164,005	1,675	1,836,115	849,047	4,812,886
Feldspar and quartz 1930	51	870,488	429	257,388	35,645	686,596
1931	33	1,342,668	166	135,809	20,996	490,119
Gypsum 1930	16	8,796,865	822	781,639	201,409	2,818,788
1931	17	7,941,082	676	656,590	188,524	2,111,517
Iron oxides 1930	4	150,704	43	41,238	13,929	83,873
1931	4	181,535	30	29,194	8,560	49,205
Mica 1930	13	441,744	244	63,316	1,102	96,004
1931	11	276,356	28	22,556	444	54,066

For footnotes see end of table, p. 353.

7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1930 and 1931—concluded.

Industry and Year.		Firms.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity.	Net Sales.[1]
		No.	$	No.	$	$	$
Non-Metallic Minerals—con.							
Other Non-Metallic Minerals—con.							
Salt	1930	8	4,685,549	381	455,539	197,313	1,694,631
	1931	7	4,196,927	363	446,984	184,001	1,904,149
Talc and soapstone	1930	6	614,384	141	79,472	16,369	186,216
	1931	5	618,590	70	71,787	19,128	157,083
Miscellaneous[3]	1930	38	3,608,896	498	527,183	188,449	1,192,417
	1931	34	5,457,930	275	297,394	205,149	1,247,697
Totals, Other Non-Metallic Minerals	1930	153	54,611,604	5,373	5,722,857	1,792,258	15,228,796
	1931	126	60,748,865	3,314	3,522,266	1,479,755	10,900,174
Totals, Non-Metallic Minerals	**1930**	**901**	**328,776,596**	**38,355**	**47,852,675**	**5,785,483**	**80,063,355**
	1931	**843**	**325,168,359**	**34,075**	**36,031,233**	**4,870,674**	**61,629,210**
Clay Products and Other Structural Materials.							
Clay Products.							
Brick, tile and sewer pipe	1930	186	32,757,926	4,870	4,807,380	1,910,899	10,296,960
	1931	171	33,159,664	3,131	3,428,142	1,476,870	7,585,310
Stoneware and pottery	1930	5	672,851	156	153,750	11,707	296,618
	1931	4	659,500	128	113,108	9,568	255,978
Totals, Clay Products	1930	191	33,430,777	5,026	4,961,130	1,922,606	10,593,578
	1931	175	33,819,164	3,259	3,541,250	1,486,438	7,841,288
Other Structural Materials.							
Cement	1930	8	59,210,737	2,317	3,172,198	4,120,367	17,713,067
	1931	9	57,378,436	1,820	2,432,950	3,280,870	15,826,243
Lime	1930	44	8,816,879	1,086	1,087,778	886,354	4,038,698
	1931	54	7,289,990	799	785,868	612,278	2,764,415
Sand and gravel	1930	724	7,550,217	5,601	2,508,037	331,010	8,344,913
	1931	704	8,635,241	3,224	2,878,011	292,892	6,651,165
Stone	1930	285	22,196,388	6,192	5,542,211	697,060	13,037,209
	1931	300	18,860,796	4,198	4,470,699	625,673	11,075,184
Totals, Other Structural Materials	1930	1,061	97,774,221	15,196	12,310,224	6,034,791	43,133,887
	1931	1,067	92,164,463	10,041	10,567,528	4,811,713	36,317,007
Totals, Structural Materials and Clay Products	**1930**	**1,252**	**131,201,998**	**20,222**	**17,271,354**	**7,957,397**	**53,727,465**
	1931	**1,242**	**125,983,627**	**13,300**	**14,108,778**	**6,298,151**	**44,158,295**
Grand Totals, Mineral Industries	**1930**	**2,178**	**887,420,859**	**89,200**	**113,975,332**	**25,066,193**	**270,785,513**
	1931	**2,397**	**842,060,020**	**72,809**	**91,969,299**	**21,509,348**	**238,170,019**

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[1] Value of shipments by mine operators and of products sold by metallurgical works, less estimated cost of ores, concentrates, matte, etc., treated, irrespective of their origin. The major part of the value of ores treated is included as products of mines and mills, but there is necessarily a lag between production of ores and sales of smelter products, while some imported ores are also treated in Canadian smelters.

[2] Value added by smelting and refining. [3] Includes a small production of peat, normally included in fuels.

Section 4.—Production of Metallic Minerals.

Subsection 1.—Gold.

Canada has been a gold-producing country for over 75 years. During the last half of the 19th century production was chiefly the result of placer operations in British Columbia and Yukon, while during the present century there has been a rapid growth of production from lode mining both of auriferous quartz and of gold in association with other metals.

In 1931 the value of gold produced in Canada exceeded that of coal for the first time. Under the influence of the current depression, the production of coal has declined in quantity and value, while the general decline in commodity prices and the heavy discount to which the Canadian dollar has been subjected in New York, have reacted to the immediate benefit of Canadian gold producers. Thus gold ranked first among the minerals in 1931 and 1932. Favourable results from prospecting and exploration, new mines coming into production, and plans for expansion in a number of producing mines, give every prospect for a continued increase in gold production.

Prior to 1924 gold production in Canada attained a maximum in 1900, when the Yukon production reached its highest point and 1,350,057 fine oz. of gold were produced. For the provinces and Yukon, the years in which the greatest yields were obtained were: Nova Scotia, 1902; Quebec, 1932; Ontario, 1932; Manitoba, 1932; Alberta, 1896; British Columbia, 1913 and Yukon, 1900. The quantities and values of gold produced in Canada are given by provinces for 1911 and subsequent years in Tables 8 and 9, 1932 establishing a new record of production with 3,050,581 fine oz.

British Columbia.—The discovery of gold in paying quantities was an epoch-making event in the history of British Columbia. In the late '50's, alluvial gold was discovered along the Thompson river and in 1858 the famous Fraser River rush took place. The extraordinarily rich deposits of Williams and Lightning creeks, in the Cariboo district, were discovered in 1860 and three years later the area had a production of alluvial gold valued at $4,000,000. In the northern part of the province, the Atlin division of the Cassiar district was prospected in 1892. Then the introduction of lode mining resulted in a rapidly increasing production until 1902, when previous records were surpassed by an output of more than 288,000 fine oz. Except for the maximum output of 297,459 fine oz. in 1913, the record of 1902 has not since been equalled. Though the bulk of the gold obtained in the Cordilleran region has been derived from the placer deposits of the central portion of the region from Yukon at the north almost to the International Boundary on the south yet a large amount, averaging 178,039 fine oz. between 1913 and 1921, was obtained by lode mining, largely of the copper-gold ores of the Rossland and Yale boundary districts. The copper concentrates of the Britannia mine also contain gold, as does the blister copper made at Anyox. The output of gold in British Columbia has been in part maintained by the successful operation of the Premier mine on the Portland canal. The Pioneer gold mine in the Lillooet district has reported a substantial production of gold during the past three years and production is expanding. Placer prospecting in British Columbia experienced a distinct revival during the 1931 and 1932 seasons and resulted in pronounced activity, especially in the Stikine, Liard, Cariboo and Atlin districts.

Yukon.—The discovery of gold in the Yukon River valley was reported in 1869, and bar-mining on the tributaries of the Yukon was conducted with increasing profit between 1881 and 1886. Ten years later, rich discoveries were made in creeks of the Klondike river, a right-bank tributary joining the Yukon at what is now Dawson city, and one of the greatest rushes in history was made to this locality. The richest streams in the district were Bonanza creek and its principal tributary, the Eldorado. There is still a production of gold from alluvial operations in Yukon.

Nova Scotia.—Gold was discovered in Nova Scotia in 1860. Two years after the discovery gold valued at nearly $142,000 was recovered from the quartz veins; a steady, though in recent years declining, output has been reported since that time.

Quebec.—Although Quebec produced gold as early as 1823, production consisted only of the small quantities recovered in the treatment of the lead and zinc ores of the Notre-Dame-des-Anges district and from the gravels of the Chaudière river. Important discoveries of copper-gold deposits, however, were more recently made at Rouyn, in the northwestern part of the province, adjacent to the Kirkland Lake district of Ontario. Smelting facilities became available for this region as the result of the opening of the Noranda smelter in December, 1927. The operation of this smelter, together with the development of new gold properties in the northwestern part of the province, has established Quebec as the second largest gold-producing province. During 1932 extensive exploration and development of new gold properties throughout the Rouyn district included the commencement of construction on a 600-800 ton mill in Duparquet township by the Beattie Gold Mines Ltd., and the beginning of mill production by the Cadillac-O'Brien gold mine in Cadillac township. Several prospects situated in Pascalis, Louvicourt, Senneville and Bourlamaque townships were active and results were reported as encouraging. In this field the Treadwell Yukon Co. commenced operating a test milling plant on their Bussières claims. The Siscoe mine in Dubuisson township and the Granada in Rouyn township were in continuous operation during 1931. The Noranda mine and smelter experienced a successful year and although there was some reduction in copper output the value of precious metals was considerably increased.

Ontario.—Although gold was first discovered in 1866 in Hastings Co. and was later found and worked at many points from there to the lake of the Woods in the west, a distance of roughly 900 miles, no permanent gold-mining industry was established until 1911, when the Porcupine camp was opened up. Soon afterwards the discovery of gold in the Kirkland Lake area, on what is now the Wright-Hargreaves mine, led to the later development of this second camp. Porcupine was the most important gold-mining area of the province and of Canada from 1912 until 1930, with the Hollinger the leading mine. In 1931 and 1932, however, output from the Kirkland Lake camp exceeded that of the older area and the Lake Shore mine increased its production beyond that of any other Canadian gold mine.

Active prospecting and development were carried on during 1932 in a number of Precambrian areas in Ontario. In the Matachewan district the Ashley mine was brought into production; exploration of prospects was widespread in the Three Duck Lakes area and in Swayze township where the Kenty Gold Mines started sinking two 500-foot shafts. In the northwestern part of the province the Howey gold mine was in continuous operation and the Moss gold mines operated their new mill for the first time. The larger gold mines of the Porcupine and Kirkland Lake areas experienced a successful year resulting in increased gold outputs for both camps.

Manitoba.—The presence of gold-bearing ores in Manitoba has been known for a decade or more and the gold production of this province is now mounting. The Central Manitoba, an auriferous-quartz property in the Rice Lake area east of lake Winnipeg, has produced gold steadily for several years and the San Antonio in the same field has had a mill operating since May, 1932. The major part of the gold of the province is, however, produced as a by-product from the Flin Flon smelter which treats copper-zinc ores. Important gold discoveries were reported in the autumn of 1931 at Island lake, which lies near the Ontario boundary to the northeast of lake Winnipeg.

8.—Quantities of Gold Produced in Canada, by Provinces, calendar years 1911-32.

Note.—For the years 1862 to 1910, see Canada Year Book, 1916-17, pp. 268 and 269.

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon.	Total.
	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.
1911	7,781	613	2,062	–	10	238,496	224,197	473,159
1912	4,385	642	86,523	–	73	251,815	268,447	611,885
1913	2.174	701	219,801	–	–	297,459	282,838	802,973
1914	2,904	1,292	268,264	–	48	252,730	247,940	773,178
1915	6,636	1,099	406,577	–	195	273,376	230,173	918,056
1916	4,562	1,034	492,481	–	82	219,633	212,700	930,492
1917	2,210	1,511	423,261	440	–	133,742	177,667	738,831
1918	1,176	1,939	411,976	1,926	27	180,163	102,474	699,681
1919	850	1,470	505,739	724	24	167,252	90,705	766,764
1920	690	955	564,995	781	–	124,808	72,778	765,007
1921	439	635	708,213	207	49	150,792	65,994	926,329
1922	1,042	–	1,000,340	156	–	207,370	54,456	1,263,364
1923	655	667	971,704	31	–	200,140	60,144	1,233,341
1924	1,047	883	1,241,728	1,180	–	245,719	34,825	1,525,382
1925	1,626	1,602	1,461,039	4,424	–	219,227	47,817	1,735,735
1926	1,678	3,680	1,497,215	188	–	225,866	25,601	1,754,228
1927	3,151	8,331	1,627,050	182	42	183,094	30,935	1,852,785
1928	1,290	60,006	1,578,434	19,813	68	196,617	34,364	1,890,592
1929	2,687	90,798	1,622,267	22,455	5	154,204	35,892	1,928,308
1930	1,272	141,747	1,736,012	23,189	–	164,331	35,517	2,102,068
1931	460	300,075	2,085,814	102,969	195	160,069	44,310	2,693,892
1932[1]	964	401,105	2,287,280	121,982	111	198,520	40,607	3,050,581[2]

[1] Figures for 1932 are subject to revision.
[2] Includes 12 oz. from Saskatchewan.

9.—Values of Gold Produced in Canada, by Provinces, calendar years 1911-32.

Note.—For the years 1862 to 1910, see Canada Year Book, 1916-17, p. 270.

(Value calculated on basis 1 fine oz. = $20·671834.)

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon.	Total.
	$	$	$	$	$	$	$	$
1911	160,854	12,672	42,625	–	207	4,930,145	4,634,574	9,781,077
1912	90,638	13,270	1,788,596	–	1,509	5,205,485	5,549,296	12,648,794
1913	44,935	14,491	4,543,690	–	–	6,149,027	5,846,780	16,598,923
1914	60,031	26,708	5,545,509	–	992	5,224,393	5,125 374	15,983,007
1915	137,180	22,720	8,404,693	–	4,026	5,651,184	4,758,098	18,977,901
1916	94,305	21,375	10,180,485	–	1,695	4,540,216	4,396,900	19,234,976
1917	45,685	31,235	8,749,581	9,095	–	2,764,693	3,672,703	15,272,992
1918	24,310	40,083	8,516,299	39,814	558	3,724,300	2,118,325	14,463,689
1919	17,571	30,388	10,454,553	14,966	500	3,457,406	1,875,039	15,850,423
1920	14,263	19,742	11,679,483	16,145	–	2,580,010	1,504,455	15,814,098

9.—Values of Gold Produced in Canada, by Provinces, calendar years 1911-32—concluded.

(Values calculated on basis 1 fine oz.—$20·671834.)

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon.	Total.
1921	9,075	13,127	14,640,062	4,279	1,013	3,117,147	1,364,217	19,148,920
1922	21,540	-	20,678,862	3,225	-	4,286,718	1,125,705	26,116,050
1923	13,540	13,788	20,086,904	641	-	4,137,261	1,243,287	25,495,421
1924	21,643	18,253	25,668,795	24,393	-	5,079,462	719,897	31,532,443
1925	33,612	33,116	30,202,357	91,452	-	4,531,824	988,465	35,880,826
1926	34,687	76,072	30,950,180	3,886	-	4,669,065	529,220	36,263,110
1927	65,137	172,217	33,634,108	3,762	868	3,784,889	639,483	38,300,464
1928	26,667	1,240,434	32,629,126	409,571	1,406	4,064,434	710,367	39,082,005
1929	55,545	1,876,961	33,535,234	464,186	103	3,187,680	741,954	39,861,663
1930	26,295	2,930,170	35,886,552	479,359	-	3,397,023	734,202	43,453,601
1931	9,509	6,203,101	43,117,600	2,128,558	4,031	3,308,920	915,969	55,687,688
1932[1]	19,928	8,291,576	47,282,272	2,521,592	2,294	4,103,772	839,421	63,061,103[2]

[1] Subject to revision.

[2] Includes $248 from Saskatchewan.

World Production.—A sketch of the development of the gold-mining industry of the world since the discovery of America may refer to four successive periods. During the first period, extending from 1493 to 1760, the annual production averaged nearly 337,000 fine oz. The placer mining of Brazil and Colombia swelled the average output of the last 60 years of the period to about 606,000 fine oz. per year.

The production of Russia from placer mining was a considerable factor in the next period, extending from 1761 to 1840, that country retaining first rank among the world's producers until 1837. The average annual production during the period was 565,500 fine oz.

The third period, extending from 1841 to 1890, was notable for the remarkable discoveries of gold in California and Australia in 1848 and 1851 respectively. The annual average during the 50 years was 4,937,000 fine oz. For the first decade the average was 1,761,000 fine oz. and for the second 6,448,000, while in the last decade it declined to 5,201,000. The production of the period was contributed chiefly by the United States, Australia and Russia.

In the fourth period, extending from 1891 to the present time, the outstanding features were the entry of South Africa as an important and later as the leading producer, and the phenomenal increase in the output of most of the gold-producing countries through the introduction of the cyanide process. The output was 6,320,000 fine oz. in 1891 and a steady increase was recorded until 1915, when a maximum of 22,737,000 fine oz. was produced. Thereafter the great increase in wages and in the other costs of production of an article of fixed value brought about a steady decline to a minimum production of 15,451,945 fine oz. in 1922, increased to 17,790,597 fine oz. in 1923, to 19,025,942 in 1925, to 19,700,000 in 1928, and to 22,819,000 in 1931, a total exceeding the former maximum of 1915. The annual world production for this period is shown in Table **10**.

10.—Quantities and Values of World Production of Gold, 1891-1931.

(From the Annual Report of the Director of the United States Mint.)

Year.	Quantity.	Value.	Year.	Quantiy.	Value.	Year.	Quantity.	Value.
	oz. fine.	$		oz. fine.	$		oz. fine.	$
1891	6,320,194	130,650,000	1905	18,396,451	380,288,300	1919	17,698,184	365,853,933
1892	7,094,266	146,651,500	1906	19,471,080	402,503,000	1920	16,130,110	332,823,934
1893	7,618,811	157,494,800	1907	19,977,260	412,966,600	1921	15,974,962	330,231,792
1894	8,764,362	181,175,600	1908	21,422,244	422,837,000	1922	15,451,945	319,420,063
1895	9,615,190	198,763,600	1909	21,965,111	454,059,100	1923	17,790,597	367,764,279
1896	9,783,914	202,251,600	1910	22,022,180	455,239,100	1924	19,031,001	393,405,653
1897	11,420,068	236,073,700	1911	22,397,136	462,989,761	1925	19,025,942	393,301,128
1898	13,877,806	286,879,700	1912	22,605,068	467,288,203	1926	19,349,118	399,981,749
1899	14,837,775	306,724,100	1913	22,254,983	460,051,329	1927	19,431,194	401,678,427
1900	12,315,135	254,576,300	1914	21,301,836	440,348,027	1928	19,700,049	407,236,156
1901	12,625,527	260,992,900	1915	22,737,520	470,026.251	1929	19,500,152	403,103,911
1902	14,354,680	296,737,600	1916	22,031,094	455,423,136	1930	20,836,318	430,724,934
1903	15,852,620	327,702,700	1917	20,345,528	420,579,351	1931	22,818,701	459,104,453
1904	16,804,372	347.377,200	1918	18,614,039	384,786,306			

In 1931 the world's chief producers were the Union of South Africa, with a production of 10,877,777 fine oz. or 47·6 p.c., Canada, producing 2,693,892 fine oz. or 11·8 p.c.[1], and the United States, producing 2,213,741 fine oz. or 9·7 p.c. As Australia, Rhodesia and British India were also important producers over 68 p.c. of the world production of 1931 was produced in the British Empire. Preliminary figures for 1932 show that Canada again led the United States in gold production and now definitely ranks second to South Africa.

Detailed statistics of world gold production for 1930 and 1931 follow.

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[1] This percentage, derived from world production as reported by the Director of the United States Mint, is slightly less than that derived from estimates of the Imperial Institute as given on p. 339.

11.—Quantities and Values of the World Production of Gold and Silver, by Countries, calendar years 1930 and 1931.

(Abridged from the Annual Report of the Director of the United States Mint.)

Country.	Calendar Year 1930.				Calendar Year 1931.			
	Gold.		Silver.		Gold.		Silver.	
	Quantity.	Value.	Quantity.	Value ($0·38724 per oz.).[1]	Quantity.	Value.	Quantity.	Value ($0·29013 per oz.).[1]
	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$
North America—								
United States	2,100,395	43,419,018	50,627,243	19,604,894	2,213,741	45,762,088	30,822,042	8,942,399
Canada	2,107,073	43,557,064	26,435,935	10,237,051	2,695,219	55,715,121	20,558,216	5,964,555
Mexico	670,488	13,860,217	105,410,912	40,819,321	623,003	12,878,615	86,064,457	24,969,881
Totals[6]	4,877,956	100,836,299	182,474,090	70,661,266	5,531,963	114,355,824	137,444,715	39,876,835
Central America and West Indies[2].	58,050	1,200,000	3,900,000	1,510,236	677,250	1,400,000	4,000,000	1,160,520
South America—								
Bolivia	16,479	340,655	7,091,100	2,745,958	17,328	358,201	5,772,307	1,674,719
Brazil	96,750	2,000,000	20,000[3]	7,745	115,473	2,387,038	10,000[3]	2,901
Chile	16,686	344,930	732,441	283,630	16,718	345,591	372,361	108,033
Colombia	158,727	3,281,188	60,000[3]	23,234	194,268	4,015,885	40,000[3]	11,605
Ecuador	69,998	1,447,000	106,127	41.097	59,616	1,232,372	104,762	30,395
Guiana—								
British	6,933	143,318	7,500[3]	2,904	6,944	143,545	6,000[3]	1,741
Dutch	3,948	81,620			4,597	95,028		
French	43,538	900,000[3]			43,531	899,865		
Peru	90,052	1,861,540	15,500,351	6,002,356	79,410	1,641,550	8,957,022	2,598,701
Venezuela	55,946	1,156,494	4,179	1,618	42,309	874,604	4,179	1,213
Totals[6]	560,057	11,577,417	23,536,698	9,114,351	580,194	11,993,679	15,266,631	4,429,308

For footnotes see end of table, p. 359.

11.—Quantities and Values of the World Production of Gold and Silver, by Countries, calendar years 1930 and 1931—concluded.

Country.	Calendar Year 1930.				Calendar Year 1931.			
	Gold.		Silver.		Gold.		Silver.	
	Quantity.	Value.	Quantity.	Value ($0·38724 per oz.).[1]	Quantity.	Value.	Quantity.	Value ($0·29013 per oz.).[1]
	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$
Europe—								
Czechoslovakia..	2.411	49.840	890.555	344,858	1,093	22,594	899,267	260,904
France	42,663	881,922	652.002	252,481	42,663	881,922	652,002	189,165
Germany........	6,076	125,602	5,485,433	2,124,179	4,115	85,064	5,784,588	1,678,283
Italy	1 723	35.627	571,653	221,367	2,165	44,757	719,324	208,698
Roumania......	85.904	1.775,793	142.038	55,002	96,482	1,994,460	155,798	45,201
Russia	1,433.664	29,636,465	300,000[4]	116,172	1,700,960	35,161,963	350,000[3]	101,545
Spain	484	10,000[4]	2,659,223	1,029,757	483	10,000[3]	3,098,713	899,030
Sweden...	60,000	1,240,310	75,000[4]	29,043	90,000	1,860,465	80,000[3]	23,210
Yugoslavia......	23,148	478,512	100,308	38,843	21,862	45,927	94,713	27,479
Totals[6]......	1,656,555	34,244,035	12,064,991	4,672,045	1,960,306	40,523,136	12,927,567	3,750,674
Asia—								
British India..	329,231	6,805,809	7,072,050	2,738,581	330,484	6,831,710	5,923,005	1,718,441
China[3]...........	96,750	2,000,000	50,000	19,362	96,750	2,000,000	60,000	17,408
Chosen (Korea)	159,608	3,299,400	68,758	26,626	169,312	3,500,000[3]	65,000[3]	18,858
Federated Malay States.........	29,597	611,824	–	–	29,462	609,033	–	–
Japan	388,740	8,035,965	5,628,558	2,179,603	425,000	8,785,530	5,000,000[5]	1,450,650
NetherlandsEast Indies........	110,435	2,282,894	2,094,251	810,978	100,083	2,068,899	1,473,113	427,394
Philippine Islds.	179.204	3,704.475	110,307	42,715	181,981	3,761,881	97,093	28,170
Taiwan.........	15,576	321,985	15,163	5,872	16,931	350,000[3]	12,000[3]	3,482
Totals[6].....	1,312,285	27,127,343	15,262,270	5,910,163	1,357,093	28,053,616	12,831,818	3,722,895
Oceania—								
Australia (including New Guinea and Papua)	499,326	10,321,988	9,649,733	3,736,762	654,214	13,523,800	8,244,091	2,391,858
New Zealand...	122,532	2,532,961	515,263	199,530	129,720	2,681,550	435,006	126,208
Totals[6]	621,858	12,854,949	10,164,996	3,936,292	783,934	16,205,350	8,679,097	2,518,066
Africa—								
Belgian Congo..	195,890	4,049,406	13,000[3]	5,034	211,758	4,377,434	15,000[3]	4,352
British West Africa	246,075	5,086,822	200	77	259,023	5,354,478	252,903	73,375
Ethiopia (Abyssinia)....	4,501	93,044	–	–	4,000[3]	82,687	–	–
French West Africa.........	5,427	112,177	–	–	5,321	110,000[3]	–	–
Madagascar.....	7,234	149,540	–	–	7,298	150,863	–	–
Rhodesia—								
Northern......	7,513	155,307	637	247	9,364	193,571	548	159
Southern ...	547,630	11,320,517	72,720	28,160	532,111	10,999,710	75,960	22,038
Tanganyika....	11,072	228,878	1,278	495	12,730	263,152	1,672	485
Union of South Africa.........	10,716,351	221,526,636	1,050,038	406,617	10,877,777	224,863,607	1,063,050	308,423
Totals[6]......	11,749,557	242,884,891	1,305,381	505,496	11,927,961	246,572,848	1,560,143	452,644
Totals for World..	**20,836,318**	**430,724,934**	**248,708,426**	**96,309,849**	**22,818,701**	**459,104,453**	**192,709,971**	**55,910,942**

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[1] Average price per fine ounce in London for 1930, and in New York for 1931. [2] Estimate based on United States imports of ore and bullion and interrogatory data. [3] Estimate based on other years' production. [4] Last year's figures. [5] Amount exported. [6] Totals include other countries not specified.

Subsection 2.—Silver.

Although no official statistics of the production of silver were published prior to 1887 the annual reports of the operating companies showed that from 1869 to 1885 about 4,000,000 oz. of silver, with a probable value of $4,800,000, were produced in the Port Arthur district in Ontario. From 1887 to 1893 the annual production ranged in value between $300,000 and $400,000, and was derived chiefly from Ontario and Quebec. The next three years saw a rapid increase in production, due to the development of the silver-lead deposits of British Columbia, and in 1896 a production worth over $2,000,000 was recorded. From 1896 to 1905 annual production varied in value between $2,000,000 and $3,500,000, rising rapidly during the next five years, to 32,869,264 fine oz. valued at $17,580,455 in 1910, as a result of the discovery of the rich ores of the Cobalt district. Since then there has been a falling-off in quantity, but owing to the higher price of the metal the value of the annual production increased to a maximum of $20,693,704 in 1918. The post-war depression and the decline in the value of silver caused a low value of production in 1921, but the industry recovered, and in 1930 production amounted to 26,443,823 fine oz. The further decline in the price of silver since that time has resulted in a decreased production, amounting to only 18,356,393 fine oz. in 1932.

The silver production of Canada is chiefly credited to the copper-gold-silver and the silver-lead-zinc ores of British Columbia, the silver-cobalt ores of northern Ontario and the silver-lead ores exported from Yukon. An appreciable amount of silver also occurs in combination with the gold ores of northern Ontario, the nickel ores of the Sudbury district and the copper-gold ores of Quebec and Manitoba. Thus most Canadian silver is produced in combination with other metals.

During 1931 much interest was created by the reported discovery at Echo bay, Great Bear lake, of mineral deposits in which high-grade native silver was associated with cobalt and radium-bearing ores. The first commercial production from this area occurred in 1932 when shipments were made to the Trail smelter in British Columbia.

Ontario.—The production of silver in Ontario in 1931 was 7,438,951 fine oz., valued at $2,222,014, practically the whole of which was derived from the rich silver-bearing ores of the Cobalt district, but small quantities were obtained from the products of the nickel refineries and from crude gold bullion. The Cobalt deposit was discovered in 1903, when the Temiskaming and Northern Ontario Railway was being built from North Bay to the head of lake Timiskaming. Later somewhat similar deposits were discovered at Gowganda, 55 miles northwest, and at South Lorrain, 18 miles southeast of Cobalt. Owing to the depletion of the ore bodies combined with the very low price of silver, operations have been much curtailed in the Cobalt, Gowganda and South Lorrain camps. During 1931 the Nipissing Mining Co. closed down their mines in Cobalt after continuous operation since 1905, while the Mining Corporation and the Keeley mine have discontinued mining operations in South Lorrain.

British Columbia.—In 1926 for the first time since 1905 this province surpassed Ontario in silver production. Comparing the quantity rather than the value, production in 1930 was the greatest on record and amounted to 11,825,930 fine oz., although this record was nearly equalled in 1927 with a production of 11,040,445 fine oz. Small amounts are recovered from alluvial gold and crude gold bullion, but the Sullivan and Premier mines have been responsible for the greater part of the output from this province. The Sullivan, primarily noted for its lead and zinc production, is the largest producer of silver in Canada. Silver was also recovered from the copper ores and concentrates which were exported for treatment in foreign smelters and from blister copper made at the Anyox smelter.

Yukon.—The increased production of silver in recent years from Yukon has been derived chiefly from the silver-lead ores exported from the Mayo district. For some years the difficulties and high cost of transportation involved in the export of these ores were serious obstacles to the successful operation of the mines. However, in the summer of 1925 the Treadwell Yukon Co. of Keno Hill, the largest producer in the district, completed a concentrating plant which has been operating steadily since that time. By eliminating much of the waste from the ores, concentration reduces the transportation costs. Ores from neighbouring mines are treated at this mill and this feature is of great assistance to the smaller operators in the district. The quantity of silver obtained from placer gold is gradually decreasing.

Statistics of the quantities and values of silver produced in Canada are given for the years since 1887 in Table **12**, while statistics of the quantities and values produced in the various provinces are given for 1911 and subsequent years in Table **13**.

12.—Quantities and Values of Silver Produced in Canada during the calendar years 1887-1932.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	oz. fine.	$		oz. fine.	$		oz. fine.	$
1887	355,083	347,271	1903	3,198,581	1,709,642	1919	16,020,657	17,802,474
1888	437,232	410,998	1904	3,577,526	2,047,095	1920	13,330,357	13,450,330
1889	383,318	358,785	1905	6,000,023	3,621,133	1921	13,543,198	8,485,355
1890	400,687	419,118	1906	8,473,379	5,659,455	1922	18,626,439	12,576,758
1891	414,523	409,549	1907	12,799,799	8,348,659	1923	18,601,744	12,067,509
1892	310.651	272,130	1908	22,106,233	11,686,239	1924	19,736,323	13,180,113
1893	–	330,128	1909	27,529,473	14,178,504	1925	20,228,988	13,971,150
1894	847,697	534,049	1910	32,869,264	17,580,455	1926	22,371,924	13,894,531
1895	1,578,275	1,030,299	1911	32,559,044	17,355,272	1927	22,736,698	12,816,677
1896	3,205,343	2,149,503	1912	31,955,560	19,440,165	1928	21,936,407	12,761,725
1897	5,558,456	3,323,395	1913	31,845,803	19,040,924	1929	23,143,261	12,264,308
1898	4,452,333	2,593,929	1914	28,449,821	15,593,631	1930	26,443,823	10,089,376
1899	3,411,644	2,032,658	1915	26,625,960	13,228,842	1931	20,562,247	6,141,943
1900	4,468.225	2,740,362	1916	25,459,741	16,717,121	1932[1]	18,356,393	5.813,769
1901	5,539,192	3,265,354	1917	22,221,274	18,091,895			
1902	4,291,317	2,238,351	1918	21,383,979	20,693,704			

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[1] Preliminary figures.

13.—Quantities and Values of Silver Produced in Canada, by Provinces, during the calendar years, 1911-32.

NOTE.—For the years 1887 to 1910, see Canada Year Book, 1916–1917, p. 271. Nova Scotia, Saskatchewan and Alberta have also shown a small production in recent years, production during 1931 being shown in Table 5, pp. 346-8.

Year.	Quebec.		Ontario.		Manitoba.		British Columbia.		Yukon and Northwest Territories.	
	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$
1911..	18,435	9,827	30,540,754	16,279,443	–	–	1,887,147	1,005,924	112,708	60,078
1912..	9,465	5,758	29,214,025	17,772,352	–	–	2,651,002	1,612,737	81,068	49,318
1913..	34,573	20,672	28,411,261	16,987,377	–	–	3,312,343	1,980,483	87,626	52,393
1914..	57,737	31,646	25,139,214	13,779,055	–	–	3,159,897	1,731,971	92,973	50,959
1915..	63,450	31,524	22,748,609	11,302,419	–	–	3,565,852	1,771,658	248,049	123,241
1916..	98,610	64,748	21,608,158	14,188,133	–	–	3,392,872	2,227,794	360,101	236,446
1917..	136,194	110,885	19,301,835	15,714,975	7,201	5,863	2,655,994	2,162,430	119,605	97,379
1918..	178,675	172,907	17,198,737	16,643,562	13,316	12,886	3,921,336	3,794,755	71,915	69,594
1919..	140,926	156,600	12,117,878	13,465,628	20,700	23,069	3,713,537	4,126,556	27,556	30,621
1920..	61,003	61,552	9,907,626	9,996,795	15,510	15,649	3,327,028	3,356,971	19,190	19,363
1921..	38,084	23,861	9,761,607	6,116,037	33	20	3,350,357	2,099,133	393,092	246,288
1922..	–	–	10,811,903	7,300,305	20	14	7,150,937	4,828,384	663,493	447,997
1923..	33,006	21,412	10,540,943	6,838,226	5	3	6,113,327	3,965,899	1,914,438	1,241,953
1924..	83,814	55,972	11,272,567	7,527,933	140	93	8,153,003	5,444,657	226,755	151,429
1925..	214,943	148,451	10,529,131	7,271,944	477	329	8,579,458	5,925,403	904,893	624,964
1926..	375,986	233,513	9,274,965	5,760,402	18	11	10,625,816	6,599,376	2,095,027	1,301,159
1927..	740,864	417,625	9,307,953	5,246,893	12	7	11,040,445	6,223,499	1,647,295	928,580
1928..	908,959	528,796	7,242,601	4,213,456	1,763	1,026	10,943,367	6,366,413	2,839,633	1,651,985
1929..	813,821	431,268	8,890,726	4,711,462	2,644	1,401	10,156,408	5,382,185	3,279,530	1,737,922
1930..	571,164	217,922	10,205,683	3,893,876	94,653	36,114	11,825,930	4,512,065	3,746,326	1,429,373
1931..	530,345	158,414	7,438,951	2,222,014	836,547	249,877	8,061,599	2,408,000	3,694,728	1,103,615
1932[1].	628,902	199,183	6,341,053	2,008,315	1,036,479	328,271	7,295,723	2,310,674	3,054,164	967,303

[1] Preliminary figures.

World Production of Silver.—The world production of silver was estimated by the Director of the United States Mint, as shown in Table **11** of this chapter, at 192,709,971 fine oz. for 1931, a decrease of 22·5 p.c. from 1930 and of 26·2 p.c. from 1929, when world production reached a record maximum of 260,970,029 fine oz. The silver production of Canada in 1931 was 20,562,247 fine oz., or about 10·7 p.c. of the estimated world total for that year. This placed Canada third, next to Mexico and the United States.

In the following historical Table **14** the world production, value and average price of silver are given for each year from 1860 up to the present. During the period from 1860 to 1872, silver was still a monetary base in parts of the western world and the price remained fairly stable at about $1.32 to $1.35 per fine oz. (about 15½ oz. silver = 1 oz. gold), although production is estimated to have more than doubled during these 12 years. After the demonetization of silver in Germany and the United States, production continued to increase and by 1889 had nearly doubled again, although the price had declined to 94 cts. In spite of a further increase in production in 1890, the price in that year rose to $1.05 per fine oz. During the next six years from 1891 to 1897, while annual world production increased only 17 p.c., the price declined nearly 40 p.c. During this same period, world gold production nearly doubled (see Table **10**). From 1898 to 1904 annual production remained fairly stationary, while the price fluctuated around 60 cts. From 1905 to 1912 there was a further rise in annual production of about 35 p.c., but the price, while fluctuating between 68 and 52 cts. per fine oz., was practically the same in 1912 as in 1905. During the economic disturbances of the War period, world production was on a lower level, while the price rose to a peak of $1.12 in 1919 but dropped to 63 cts. in 1921. From then until 1929, world production increased again by 50 p.c. and the price after a rise to 74 cts. in 1924 declined steadily to 54 cts. On account of the world depression in 1930 and 1931, production has declined, while the price has dropped to little more than half the lowest price recorded in any other period shown in the table. The fact that silver is to a great extent a by-product is largely responsible for its present low price.

14.—Quantities and Values of World Production of Silver, with Annual Average Prices, 1860-1931.

(From the Annual Report of the Director of the United States Mint.)

Year.	Quantity.	Value.	Average Price per Fine Oz.[1]	Year.	Quantity.	Value.	Average Price per Fine Oz.[1]	Year.	Quantity.	Value.	Average Price per Fine Oz.[1]
	000 oz. fine.	$000.	$		000 oz. fine.	$000.	$		000 oz. fine.	$000.	$
1860.....	29,095	39.337	1·352	1884...	81,568	90,785	1·113	1908...	203,131	108,655	0·535
1861	35.402	46,191	1·305	1885...	91,610	97,519	1·065	1909...	212,149	110,364	0·520
1862	35,402	47,651	1·346	1886...	93,297	92,794	0·995	1910...	221,716	119,727	0·540
1863	35,402	47,616	1·345	1887...	96.124	94,031	0·979	1911...	226,193	122,144	0·540
1864.....	35,402	47,616	1·345	1888...	108.828	102,186	0·939	1912...	230,904	141,972	0·615
1865.....	35.402	47.368	1·338	1889...	120,214	112,414	0·935	1913...	210,013	126,848	0·604
1866.....	43,052	57,646	1·339	1890...	126,095	131,937	1·046	1914...	172,264	95,262	0·553
1867.....	43,052	57,173	1·328	1891...	137,170	135,500	0·988	1915...	173,001	89,912	0·519
1868....	43,052	57,086	1·326	1892...	153,152	133,404	0·871	1916...	180,802	124,011	0·686
1869.. .	43,052	57,043	1·325	1893 ..	165,473	129,120	0·780	1917...	186,125	166,241	0·893
1870.....	43.052	57,173	1·328	1894...	164,610	104,493	0·635	1918...	203,159	200,002	0·985
1871	63,317	83,958	1·326	1895...	167,501	109,546	0·654	1919...	179,850	201,588	1·121
1872....	63,317	83,705	1·323	1896...	157,061	105,859	0·673	1920...	173,296	176,658	1·019
1873.....	63.267	82,121	1·298	1897...	160,421	96,253	0·600	1921...	171,286	108,110	0·631
1874.....	55,301	70,674	1·279	1898...	169,055	99,743	0·590	1922...	209,815	142,536	0·679
1875	62.262	77,578	1·246	1899...	168,337	101,003	0·600	1923...	246,010	172,276	0·700
1876 ...	67,753	78,323	1·156	1900...	173,591	107,626	0·620	1924...	239,485	178,311	0·744
1877....	62.680	75.279	1·201	1901...	173,011	103,807	0·600	1925...	245,214	172,498	0·703
1878 ...	73.385	84,540	1·153	1902...	162,763	86,265	0·530	1926...	253,795	159,569	0·629
1879.....	74,383	83,533	1·124	1903...	167,689	90,552	0·540	1927...	253,981	144,947	0·570
1880....	74,795	85,641	1·145	1904...	164,195	95,233	0·580	1928...	257,925	151,214	0·586
1881....	79.021	89,926	1·138	1905 .	172,318	105,114	0·610	1929...	260,970	139,961	0·536
1882....	86.472	98,232	1·136	1906 ..	165,054	111,721	0·677	1930...	248,708	96,310	0·387
1883.....	89,175	98,984	1·111	1907...	184,207	121,577	0·660	1931...	192,710	55,911	0·290

[1] At the average par price of a fine ounce of silver in London, excepting the years 1918 to 1922, inclusive, and 1931, for which the mean of the New York bid and asked prices was used.

Subsection 3.—Copper.

The copper-mining industry has developed at a very rapid rate. A production of 3,505,000 lb. in 1886 had doubled 6 years later. By 1913, the output had increased over twenty-one fold, amounting to 76,976,925 lb. The extraordinary demand for war requirements resulted in an average production from 1916 to 1918 of 115,048,931 lb. In the post-war depression production dropped to less than 43,000,000 lb. in 1922, but recovered rapidly and in 1930 reached the record of 303,478,356 lb. The preliminary estimate for 1932, a year of general depression with a very low price ruling for copper, indicates a production of 247,678,503 lb.

or only 28·4 p.c. below the record of 1930. This contrasts favourably with the production in the former depression year 1922 and shows the expansion of the copper industry in Canada in the past decade. Some Canadian copper producers, located principally in Manitoba, Ontario and Quebec, are fortunate in possessing ores containing sufficiently high values in precious metals to permit of operation in spite of the abnormally low copper prices prevailing in 1931 and 1932, so that copper has remained third in value among the minerals produced in Canada. Yet the low prices have lessened production and have also curtailed the search for and development of new copper properties. In June of 1932 the United States instituted a duty of 4 cents per pound on foreign copper, which adversely affected Canadian copper production, more especially that of British Columbia. Shortly afterwards, at the Imperial Economic Conference in Ottawa, it was recommended that Great Britain impose a duty of 2 pence per pound on copper produced outside the Empire, provided that if at any time Empire producers were unable or unwilling to offer this commodity on first sale in the United Kingdom at prices not exceeding the world prices and in quantities sufficient to supply the requirements of United Kingdom consumers, the duty might be removed.

Quebec.—Until 1894, when Ontario took the lead, Quebec was the chief copper-producing province of Canada, the principal mines being the Eustis and Huntingdon properties in the Eastern Townships. There is still an annual production from this field. Recent developments in the Rouyn camp of northwestern Quebec have resulted in a greatly increased production of copper since 1927. These deposits are associated with an easterly extension of formations similar to those of the Kirkland Lake area in Ontario. The first discoveries were located as gold prospects; the existence of large bodies of copper and zinc ores was subsequently proved and there is now a large production of copper as well as of gold. During 1931 the Canadian Copper Refiners, Ltd., commenced treating blister copper in their new plant located at Montreal East. This material came from the Noranda smelter and the smelter at Flin Flon, Manitoba.

Ontario.—The Sudbury deposits were first noted in 1856 but did not attract attention until 1883-4, during the construction of the C.P.R., when a railway cutting was made through the small hill on which the Murray mine was afterwards located. During the first years the deposits were developed for their copper content alone; not until 1887 was the presence of nickel determined and the true value of the ores known. These nickel-copper ores of the Sudbury area are the source of nearly all the copper produced in Ontario. Under the International Nickel Co. of Canada, an amalgamation of the former International Nickel Co. and the Mond Nickel Co., an extensive program of expansion in the mining and metallurgical facilities of the district has been carried out. A subsidiary company, the Ontario Refining Co., Ltd., has completed a copper refinery at Copper Cliff where electrolytically refined copper is produced from the blister copper smelted by the International Nickel Co., chiefly from ores from their own mines in the district. The company also operates the Acton precious metals refinery situated near London, Eng., where it recovers, in a refined state, the gold, silver and platinum metals contained in the concentrates produced at both the Swansea and Port Colborne nickel refineries. The Falconbridge Nickel Mines, operating a mine in Falconbridge township, make a copper-nickel matte which is shipped to Norway for refining. Adverse industrial conditions led to reductions in the copper production of Ontario in 1931 and 1932.

Manitoba.—During the four years 1917-20, with high prices prevailing for copper, ores containing 9,866,328 lb. of copper were shipped by the Mandy mine. Much development has been carried on in the Flin Flon district of Manitoba in the last ten years, and large bodies of ore have been proven on the Flin Flon property of the Hudson Bay Mining and Smelting Co. and the Sherritt-Gordon property. About 135 miles of branch line from the Hudson Bay Railway provide these properties with transportation facilities. A copper smelter and electrolytic zinc plant are operated by the Hudson Bay Mining and Smelting Co. at Flin Flon, while a large hydraulic development on the Churchill river provides the necessary power. Production from the plants of this company was continuous throughout 1931 and 1932.

British Columbia.—Until 1930, British Columbia had been the leading copper producer among the provinces for many years, but it then gave first place to Ontario and in 1931 production further declined, owing to the closing of the Copper Mountain mine and the curtailed operations at Britannia as a result of the low price of copper. The production of the province during 1931 and 1932 consisted of the blister copper produced at Anyox by the Granby Consolidated Mining, Smelting and Power Co., Ltd., and the copper estimated as recoverable from the ores, matte and concentrates exported. The principal copper-producing mines in British Columbia are the Britannia mine on Howe sound, and the Hidden Creek and Bonanza mines on Portland canal. The Hidden Creek and Bonanza ores are smelted at the Anyox smelter.

15.—Quantities of Copper Produced in Canada, by Provinces, with Total Values, calendar years 1911-32.

Note.—For the years 1886 to 1910, see Canada Year Book, 1916–17, p. 272.

Year.	Quebec.	Ontario.	Manitoba.	British Columbia.	Yukon.	Totals.	
	lb.	lb.	lb.	lb.	lb.	lb.	$
1911	2,436,190	17,932,263	–	35,279,558	–	55,648,011	6,886,998
1912	3,282,210	22,250,601	–	50,526,656	1,772,660	77,832,127	12,718,548
1913	3,455,887	25,885,929	–	45,791,579	1,843,530	76,976,925	11,753,606
1914	4,201,497	28,948,211	–	41,219,202	1,367,050	75,735,960	10,301,606
1915	4,197,482	39,361,464	–	56,692,988	533,216	100,785,150	17,410,635
1916	5,703,347	44,997,035	–	63,642,550	2,807,096	117,150,028	31,867,150
1917	5,015,560	42,867,774	1,116,000	57,730,959	2,460,097	109,227,332	29,687,989
1918	5,869,649	47,074,475	2,339,751	62,865,681	619,878	118,769,434	29,250,536
1919	2,691,695	24,346,623	3,348,000	44,502,079	165,184	75,053,581	14,028,265
1920	880,638	32,059,993	3,062,577	45,319,771	277,712	81,600,691	14,244,217
1921	352,308	12,821,385	–	34,447,127	–	47,620,820	5,953,555
1922	–	10,943,636	–	31,936,182	–	42,879,818	5,738,177
1923	–	31,656,800	–	55,224,737	–	86,881,537	12,529,186
1924	1,893,008	37,113,193	–	65,451,246	–	104,457,447	13,604,538
1925	2,510,141	39,718,777	–	69,221,600	–	111,450,518	15,649;882
1926	2,674,058	41,312,867	–	89,108,017	–	133,094,942	17,490,300
1927	3,119,848	45,341,295	–	91,686,297	–	140,147,440	17,195,487
1928	33,697,949	66,607,510	–	102,283,210	107,377	202,696,046	28,598,219
1929	55,337,169	88,879,853	–	103,903,738	–	248,120,760	43,415,251
1930	80,310,363	127,718,871	2,087,609	93,318,885	42,628	303,478,356	37,948,359
1931	68,376,985	112,882,625	45,821,432	65,223,348	–	292,304,390	24,114,065
1932[1]	67,336,692	77,055,413	52,706,294	50,580,104	–	247,678,503	15,294,022

[1] Preliminary figures.

World Production of Copper.—World production of copper was estimated at 1,523,200 short tons in 1931, as compared with 2,150,400 tons in 1929, the record year. Canada had an output of 146,152 tons in 1931, producing about 9·4 p.c. of the world's estimated total and standing third among the nations.

16.—Copper Production of the Leading Countries and of the World, 1913-31.[1]

(In short tons of 2,000 pounds.)

Year.	Canada.[1]	Northern Rhodesia.	Belgian Congo.	Chile.	Japan.	Mexico.	Peru.	Spain and Portugal.	United States.	World Production.
1913....	38,488	–	–	46,574	73.283	58.185	30,600	39,683	614,255	1,072,674
1914....	37,868	–	–	49,221	77,650	40,043	29,853	29,652	579,133	1,021,233
1915....	50,393	–	–	57,680	83,108	34,128	38,269	40,895	712,126	1,188,172
1916....	58,575	–	–	78,559	110,900	60,751	47,472	39,021	971,123	1,533,294
1917....	54,614	–	–	112,985	119,058	52,348	49,784	45,084	961,016	1,579,675
1918....	59,385	–	–	117,851	99,583	83,233	48.944	50,596	968,687	1,569,523
1919....	37,527	–	–	87,721	86,468	66,661	43,243	38,581	604,642	1,069,437
1920....	40,800	–	–	109,075	74,727	49,866	36,356	25,353	635,248	1,082,652
1921....	23,810	–	–	65,299	59,626	13,576	36,689	36,596	238,420	600,960
1922....	21,440	–	–	142,830	59,663	29,842	40,133	40,234	511,970	995,045
1923....	43,441	–	–	201,042	70,315	60,538	48,684	57,115	754,000	1,411,980
1924....	52,229	–	–	209,855	69,378	49,150	38,495	60,713	819,000	1,522,394
1925....	55.725	83	99,323	209,654	72,413	59,123	41,180	63,933	854,000	1,589,717
1926....	66,547	793	88,889	223,015	72,277	62,303	46,703	63,933	878,000	1,637,489
1927....	70,074	3,685	98,278	264,242	73,381	63,760	52,438	60,351	847,419	1,682,361
1928....	101,348	6,642	123,962	316,141	75,214	72,280	62,233	61,600	904,898	1,892,800
1929....	124,060	6,122	151,007	353,434	83,190	95,409	61,855	75,040	997,555	2,150,400
1930....	151,739	7,021	153,164	242,865	87,119	80,922	52,416	73,920	705,073	1,769,600
1931....	146,152	25,536	132,160	247,520	83,608	59,757	48,832	62,720	528,875	1,523,200

[1] From the Imperial Institute except in the case of the production for Canada, where the official figures of the Dominion Bureau of Statistics are used.

Subsection 4.—Lead.

Lead is obtained in Canada largely from the deposits of British Columbia. From 88,665 lb. in 1891 the production advanced to over 39,000,000 lb. in 1897. Owing to the low price of silver in 1898 and labour troubles in the Slocan in 1899, the output in the latter year fell to 21,900,000 lb., but rose to 63,200,000 lb. in 1900. The output fell to 18,100,000 lb. in 1903, owing to the condition of the market affecting the production of the low-grade silver-lead ores of the East Kootenay district. An Act of October, 1903, provided for the payment of bounties on lead contained in lead-bearing ores mined in Canada and, as a direct result of the bounty, the output increased to 56,900,000 lb. in 1905 but fell off gradually to 23,800,000 lb. in 1911. A marked increase has since been experienced, a record total of 337,946,688 lb. being reached in 1928, while production in 1929 and 1930 continued at nearly the same level. Owing to the very low price to which the metal has since declined, production has fallen off, the preliminary estimate for 1932 being 255,949,960 lb.

British Columbia.—In the East and West Kootenay districts there are many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley. The ore averages about 11 p.c. lead, 7 p.c. zinc and 5 ounces of silver to the ton. The successful solving by the Consolidated Mining and Smelting Co. of the metallurgical problems connected with the separation and reduction of these lead-zinc ores accounts to a considerable extent for the rapid growth in lead production during recent years. As a result of the low prices prevailing since 1930 for lead, zinc, and silver, many of the small silver-lead mines of the Slocan and the Monarch mine at Field have remained idle.

Other Provinces.—Occurrences of lead have been found in Gaspé peninsula and in the Rouyn district of Quebec, but the only production of importance has come from the Notre-Dame-des-Anges district, Portneuf Co., where the Tetrault mine was a consistent producer of lead and zinc concentrates until 1930, when operations were suspended owing to the low prices of these metals. Lead mining in Ontario has been intimately associated with the successful operations of the Galetta mine and smelter, which closed down in the summer of 1931 owing to the low price of lead. Recent discoveries in the Sudbury Basin area have disclosed bodies of lead-zinc ore. These properties were under development but operations have been suspended and very little production has come from them as yet. An important production of lead came in recent years from the silver-lead ores of the Mayo district of Yukon. These operations are described under "silver" on pp. 359-63 of this chapter.

17.—Quantities and Values of Lead Produced from Canadian Ores, calendar years 1901-32.

NOTE.—For figures for the years 1887-1900, see 1929 Year Book, p. 367.

Year.	Quantity.[1]	Value.	Price per Pound.[1]	Year.	Quantity.[1]	Value.	Price per Pound.[1]
	lb.	$	cts.		lb.	$	cts.
1901	51,900,958	2,249,387	4·334	1917	32,576,281	3,628,020	11·137
1902	22,956,381	934,095	4·069	1918	51,398,002	4,754,315	9·250
1903	18,139,283	768,562	4·237	1919	43,827,669	3,053,037	6·966
1904	37,531,244	1,617,221	4·309	1920	35,953,717	3,214,262	8·940
1905	56,864,915	2,676,632	4·707	1921	66,679,592	3,828,742	5·742
1906	54,608,217	3,089,187	5·657	1922	93,307,171	5,817,702	6·219
1907	47,738,703	2,542,086	5·325	1923	111,234,466	7,985,522	7·179
1908	43,195,733	1,814,221	4·200	1924	175,485,499	14,221,345	8·104
1909	45,857,424	1,692,139	3·690	1925	253,590,578	23,127,460	9·120
1910	32,987,508	1,216,249	3·687	1926	283,801,265	19,240,661	6·751
1911	23,784,969	827,717	3·480	1927	311,423,161	16,477,139	5·256
1912	35,763,476	1,597,554	4·467	1928	337,946,688	15,553,231	4·576
1913	37,662,703	1,754,705	4·659	1929	326,522,566	16,544,248	5·063
1914	36,337,765	1,627,568	4·479	1930	332,894,163	13,102,635	3·933
1915	46,316,450	2,593,721	5·600	1931	267,342,482	7,260,183	2·710
1916	41,497,615	3,532,692	8·513	1932[2]	255,949,960	5,409,758	2·114

[1] Previous to 1913 the figures reported show the metal content of the shipments and are somewhat in excess of the actual amount recovered. Since 1912 the data given represent the quantity of lead produced in Canada from domestic ores, together with the estimated lead recovery from lead ores and concentrates exported. From 1901 to 1908, average prices at New York; 1909 and 1910, average prices at Toronto; from 1911 to 1925, average prices at Montreal; from 1926 to 1931 the average yearly prices at London, Eng., were used in making up the values shown. [2] Preliminary figures.

World Production.—The world production of lead in 1931 was about 1,400,000[1] short tons. The principal producers were the United States with 26·6 p.c., Mexico 15·1 p.c., Australia 11·3 p.c., Canada 8·9 p.c., Spain 7·8 p.c. and Germany 7·3 p.c.

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[1] From the Imperial Institute.

Subsection 5.—Nickel.

With the exception of the small amounts of nickel recovered from the ores of the Cobalt district, the Canadian production of nickel has been derived entirely from the well-known nickel-copper deposits of the Sudbury district, Ontario. A brief description of the history and development of the nickel-copper mining industry will be found under copper in subsection 3 of this section. From 830,477 lb. in 1889, the production of nickel increased continually to a war-time peak of 92,507,293 lb. in 1918. After a slump to 19,293,060 lb. and 17,597,123 lb. in 1921 and 1922 respectively there was an increase to 73,857,114 lb. in 1925. In 1928 production at 96,755,578 lb. exceeded that of the war year 1918, while 1929 established a record at 110,275,912 lb. Preliminary figures for production in 1932 are 30,327,968 lb.

In recent years the producing companies have instituted extensive researches to discover and encourage new peace-time uses for the metal. The success attending their efforts in that direction accounted very largely for the marked increase in production during the nineteen-twenties. The automobile industry, electrical machinery, cooking utensils, new submarine cables and various nickel alloys all helped to absorb this increased production. Unfortunately the world-wide depression has seriously affected the demand for a commodity so dependent upon the world's industrial markets and production was greatly curtailed in 1931 and 1932.

Sudbury.—The nickel-bearing rocks of the Sudbury district, with a width of about two and one-half miles, form a wide ellipse 36 miles long and 13 miles broad. The ore mined in the district contains nickel, copper and iron, but cobalt, gold, silver, platinum and palladium are nearly always present in relatively small quantities. The proved deposits of nickel ore in Canada are estimated to be sufficient to provide for the world's requirements for many years, while there are still large reserves undeveloped.

World Production.—The world production of nickel was about 35,500 long tons in 1931, of which output 82·6 p.c.[1] was Canadian in origin, while the remainder was derived from New Caledonia, India, Norway and Greece.

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[1] These figures, taken from the Imperial Institute's Statistical Summary, include some nickel produced in the U.S. as a by-product from the electrolytic refining of Canadian copper; such nickel is not included in Table **18**.

18.—Quantities and Values[1] of Nickel Produced in Canada during the calendar years 1901-32.

NOTE.—For figures for the years 1889-1900, see 1929 Year Book, p. 368.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	lb.	$		lb.	$		lb.	$
1901.......	9,189,047	4,594,523	1912.....	44,841,542	13,452,463	1923.....	62,453,843	18,332,077
1902.......	10,693,410	5,025,903	1913.....	49,676,772	14,903,032	1924.....	69,536,350	12,126,739
1903.......	12,505,510	5,002,204	1914.....	45,517,937	13,655,381	1925.....	73,857,114	15,946,672
1904.......	10,547,883	4,219,153	1915.....	68,308,657	20,492,597	1926.....	65,714,294	14,374,163
1905.......	18,876,315	7,550,526	1916.....	82,958,564	29,035,498	1927.....	66,798,717	15,262,171
1906.......	21,490,955	8,948,834	1917.....	82,330,280	33,732,112	1928.....	96,755,578	22,318,907
1907.......	21,189,793	9,535,407	1918.....	92,507,293	37,002,917	1929.....	110,275,912	27,115,461
1908.......	19,143,111	8,231,538	1919.....	44,544,883	17,817,953	1930.....	103,768,857	24,455,133
1909.......	26,282,991	9,461,877	1920.....	61,335,706	24,534,282	1931.....	65,666,320	15,267,453
1910.......	37,271,033	11,181,310	1921.....	19,293,060	6,752,571	1932[2].....	30,327,968	7,179,862
1911.......	34,098,744	10,229,623	1922.....	17,597,123	6,158,993			

[1] A change in the method of computing the value of nickel produced accounts for the drop in value after 1923. [2] Preliminary figures.

Subsection 6.—Cobalt.

The major portion of the world supply of cobalt was for almost two decades derived from the silver-cobalt-nickel arsenides of the Cobalt district, the cobalt produced by refineries in southern Ontario having practically controlled world production until recent years. Large deposits of cobalt-bearing ores occur in central Africa, and the introduction into the world's markets of cobalt from this source has limited the market for the Canadian product to such an extent that since 1926 Canadian production has dropped to less than half of the world production.

The ore bodies at Cobalt, discovered in 1903, carry silver, cobalt, nickel, bismuth and arsenic. The Deloro smelter treats ores and residues and disposes of cobalt oxide, metallic cobalt and unseparated oxides of nickel and cobalt. The smelter output of cobalt, computed as the metallic cobalt and cobalt in oxides together with the cobalt recovered in ores exported from the mines and including cobalt in residues exported, amounted in 1931 to 521,051 lb. valued at $651,179, as against 1,116.492 lb. valued at $2,328,517 in 1925. Production in 1932 is estimated at 490,631 lb.

Subsection 7.—Zinc.

The zinc-mining industry of Canada has recently made rapid strides, largely on account of the application of improved metallurgical methods in the treatment of the lead-zinc ores of British Columbia. The metallic recoveries from Canadian ores were 267,643,505 lb. in 1930, as compared with 5,600,000 lb. in 1913. From an insignificant position in 1913 the country advanced to the second position among the world's producers in 1931 with an output of about 15·9 p.c. of the world total. Production in 1932 is estimated at 172,283,558 lb.

British Columbia.—The principal zinc-mining regions are situated in the Kootenay district of British Columbia, where there are large deposits of silver-lead-zinc ore. The chief producing mine is the Sullivan near Kimberley, where the ore worked is a replacement deposit of considerable size. Other mines are located in the Ainsworth and Slocan divisions of the West Kootenay district. Further information regarding lead-zinc mining and metallurgical operations is given under "Lead".

Other Provinces.—There has been considerable exploration and development of zinc-bearing deposits during recent years in Eastern Canada, where these ores are often characterized by the close association of copper, zinc and gold. In north-western Manitoba the Flin Flon and Sherritt-Gordon mines have ores of this nature and refined zinc has been made at the Flin Flon smelter since the autumn of 1930. Some important deposits of zinc-bearing ore have been developed in the Rouyn district of Quebec. Zinc is associated with lead in the deposits at Galetta, Ontario, and at Notre-Dame-des-Anges, Quebec, and mines in both these districts have been producers of zinc concentrates, while the Errington mine in the Sudbury district was developing a lead-zinc deposit and made some small shipments of zinc concentrates. All these eastern lead-zinc properties were inactive in 1931 and 1932.

19.—Production of Zinc in Canada, calendar years 1911-32.

Year.	Quantity.[1]	Value.	Average Price per lb.	Year.	Quantity.[1]	Value.	Average Price per lb.
	lb.	$	cts.		lb.	$	cts.
1911..........	1,877,479	108,105	5·758	1922..........	56,290,000	3,217,536	5·716
1912..........	4,283,760	297,421	6·943	1923..........	60,416,240	3,991,701	6·607
1913..........	5,640,195	318,558	5·648	1924..........	98,909,077	6,274,791	6·344
1914..........	7,246,063	377,737	5·213	1925..........	109,268,511	8,328,446	7·622
1915..........	9,771,651	1,292,789	13·230	1926..........	149,938,105	11,110,413	7·410
1916..........	23,364,760	2,991,623	12·804	1927..........	165,495,525	10,250,793	6·194
1917..........	29,668,764	2,640,817	8·901	1928..........	184,647,374	10,143,050	5·493
1918..........	35,083,175	2,862,436	8·159	1929..........	197,267,087	10,626,778	5·387
1919..........	32,194,707	2,362,448	7·338	1930..........	267,643,505	9,635,166	3·600
1920..........	39,863,912	3,057,961	7·671	1931..........	237,245,451	6,059,249	2·554
1921..........	53,089,356	2,471,310	4·655	1932[2]..........	172,283,558	4,144,454	2·406

[1] Estimated foreign smelter recoveries and refined zinc made in Canada. [2] Preliminary figures.

Subsection 8.—Iron.[1]

Iron ore is widely distributed in Canada and extensive deposits have been discovered from time to time. In Quebec there is a small annual production of titaniferous iron ore from a deposit near Baie St. Paul, but this material which is principally exported is used for its titanium content and not as a source of iron. There are millions of tons of iron magnetite sands, containing a high percentage of iron, along the north shore of the St. Lawrence in Saguenay Co., but these sands contain a high percentage of titanium, rendering the briquetted ore unfavourable for blast-furnace treatment. Efforts to utilize them have not proved successful. There are also a number of deposits of bog iron ore in the St. Lawrence valley remarkably free from sulphur and phosphorus. These bog iron ores were successfully used in charcoal blast furnaces at Radnor Forges and Drummondville for many years. The known deposits of non-Bessemer iron ore in northern Ontario are very extensive. Millions of tons of red hæmatite were taken from the Helen mine in the Michipicoten district, while the Magpie mine in the same district produced siderite which was roasted before being shipped to the blast furnaces at Sault Ste. Marie. In British Columbia, some development work has been done on iron deposits on Kamloops lake and on Texada island, but no iron-mining or iron-smelting industry has become established in that province. Extensive deposits of hæmatite exist on the Belcher islands in Hudson bay, but the ore is rather low in grade and its comparative inaccessibility renders its development impracticable. Immense deposits of iron ores, large masses being high-grade, have been reported along the course of the Koksoak river, in northern Quebec, but these are so inaccessible that up to the present they have not even been systematically explored.

Hitherto there has been no great incentive to the development of the iron-mining industry in Canada, since there are easily accessible and abundant supplies in the higher-grade ores of Wabana, Newfoundland and of the Mesabi range in Minnesota. The Wabana section of Newfoundland contains one of the largest deposits of iron ore in the world, the probable reserves in that area being estimated at 3,635,000,000 tons, and consisting of an exceptionally high-grade hæmatite.

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[1] A sketch of the iron and steel industry of Canada was given on pp. 452-456 of the 1922-23 Year Book.

In Ontario, where the iron and steel industry has reached its largest development in Canada, cheap and high-grade supplies of iron ore are readily available from the Mesabi range of Minnesota, while coal supplies are drawn from the nearby coal fields of Pennsylvania.

From Table **20**, it will be observed that the tonnage of pig iron made in Canada in 1929 exceeded that of any previous year, while the 1929 quantities of steel ingots and castings made were exceeded only in the war years 1917 and 1918. Production has fallen off considerably since 1929 as a result of the reaction which set in during the latter part of that year. Ontario has been the leading producer of pig iron throughout the years recorded.

20.—Iron Ore Shipments and Production of Pig Iron and of Steel Ingots and Castings, calendar years 1909-32.

Year.	Ore Shipments from Canadian Mines.	Production of Pig Iron.						Production of Steel Ingots and Castings.
		Nova Scotia.		Ontario.		Total.[1]		
	short tons.	short tons.	$	short tons.	$	short tons.	$	short tons.
1909	268.043	354.380	3.453.800	407,012	6,002,441	757,162	9,581,864	754,719
1910	259.418	350.287	4,203,444	447,273	6,956,923	800,797	11,245,622	822,284
1911	210.344	390.242	4.682.904	526,635	7.606.939	917,535	12,307,125	882,396
1912	215.883	424,994	6.374.910	589.593	8,176,089	1,014,587	14,550,999	957,681
1913	307.634	480.068	7,201.020	648.899	9.338.992	1,128.967	16,540,012	1,168,993
1914	244.854	227.052	2.951.676	556.112	7.051.180	783.164	10.002.856	828,641
1915	398.112	420.275	5.463.575	493,500	5,910,624	913,775	11.374,199	1,020,896
1916	275.176	470.055	7,050,825	699,202	9,700,073	1.169,257	16,750,898	1,428,249
1917	215.302	472.147	10.387.234	684.642	13,902,867	1,170,480	25,025,960	1,745,734
1918	211.608	415.870	10.451.400	747,650	21.324,857	1,195,551	33,495,171	1,873,708
1919	197,170	285,087	7.141.641	624,993	17.104.151	917.781	24,577.589	1,030,342
1920	129,072	332,493	7,687,614	749,068	22,252,062	1,090,396	30,319,024	1,232,697
1921	59.509	169,504	4.407.104	495,489	12,882,714	665,676	17.307,576	747,582
1922	17,971	135,261	3,139,994	293,662	6,493,513	428,923	9,633,507	544,020
1923	30,752	310.972	5,360,099	674,428	15,995,496	985,400	21,355,595	990,942
1924	1.480	177,078	3,842,593	415,971	9,525,736	593,049	13,368.329	728,773
1925	3,978[4]	226,010	4,402,674	413.247	8,040,015	639,257	12,442,689	842,803
1926	200[4]	280.266	6,165,852	567,929	10,495,122	848,195	16,660,974	869,413
1927	2,029[4]	279,495	[2]	515,366	[2]	794,861	[2]	1,016,555
1928	2,244[4]	339,087	–	823,168	–	1,162,254	–	1,382,885
1929	2,748[4]	348,097	–	861,682	–	1,209,779	–	1,543,387
1930	412[4]	238,152	–	598,687	–	836,839	–	1,130,727
1931	1,509[4]	113,560	–	356,883	–	470,443	–	752,762
1932[3]	–	34,381	–	127,045	–	161,426	–	383,923

[1] Including a small production from Quebec in certain years. [2] Owing to the fact that much of the pig iron produced in Canada is used by the firms producing it for further manufacture in their own plants, no attempt has been made since 1925 to place a nominal value on such production. [3] Preliminary figures. [4] Titaniferous iron ore.

Section 5.—Production of Non-Metallic Minerals.

Subsection 1.—Fuels.

Coal.

The fuel situation in Canada is somewhat anomalous as, in spite of the enormous resources of coal in the country, about 50 p.c. of the consumption is imported. The Canadian coal areas are situated in the eastern and western provinces, while Ontario and Quebec are more easily and economically supplied with coal from the nearer coal fields of Pennsylvania and Ohio.[1] The anomaly of the situation is accentuated if we consider that Canada's present coal consumption is about 35,000,000 tons annually, as against reserves of 1,234,289,000,000 metric tons, sufficient for an unthinkably long period at the present rate of consumption.

The Dominion Fuel Board, with the Deputy Minister of the Department of Mines as chairman, was constituted in 1922 to meet the need for a standing organization definitely responsible for the systematic study of the fuel position of the Dominion.

Coal Resources.—A summary of the known coal resources of Canada was given on pages 391-394 of the 1922-23 Year Book; the accompanying table is reproduced as Table **21.**

21.—Coal Resources of Canada, by Provinces and Classes of Coal.[1]

(In metric tons of 2,204 pounds.)

Province or District.	Including Seams of 1 foot or over at Depths to 4,000 feet.					Including Seams of 2 feet and over, at Depths between 4,000 and 6,000 feet.	
	Actual Reserve.			Probable Reserve.		Probable Reserve.	
	Calculation Based on Actual Thickness and Extent.			Approximate Estimate.		Approximate Estimate.	
	Area, sq. miles.	Class of Coal.[3]	Thousands of tons.	Area, sq. miles.	Thousands of tons.	Area, sq. miles.	Thousands of tons.
Nova Scotia	174	B	2,188,151	204	4,891,817	73	2,639,000
New Brunswick	–	B	–	121	151,000	–	–
Ontario[4]	–	L	–	10	25,000	–	–
Manitoba	–	L	–	48	160,000	–	–
Saskatchewan	306	L	2,412,000	13,100	57,400,000	–	–
Alberta	25,300	L	382,500,000	56,375	491,271,000	203	12,700,000
		B	3,223,800		182,183,600		
		A & B	669,000		100,000		
British Columbia	439	A & B	23,771,242	6,196	44,907,700	11	2,160,000
		L	60,000		5,136,000		
Yukon	–	A & B	–	2,840	250,000	–	–
		L	–		4,690,000		
Northwest Territories	–	L	–	300	4,800,000	–	–
Arctic Islands	–	B	–	6,000	6,000,000	–	–
Totals	**26,219**	–	**414,804,193**[2]	**85,194**	**801,966,117**	**287**	**17,499,000**

[1] See "Coal, Coke and By-Products", published by the Imperial Mineral Resources Bureau.
[2] The coal of all classes mined in Alberta to 1911, amounting to 20,000,000 tons, has been deducted.
[3] A=anthracite, B=Bituminous, L=Lignite.
[4] Extensive investigation has been carried on by the Ontario authorities in connection with the Onakawana lignite deposits of the Moose River basin, James Bay region, and development work was carried on throughout 1931.

The coal production in 1931 amounted to 12,243,211 short tons, valued at $41,207,682, or an average of $3.37 per ton. This represented a decrease of 5,321,082 tons, or 30 p.c., as compared with 1928, the record year. Nova Scotia was again the leading producer. The coal produced in Nova Scotia, New Brunswick, British Columbia and Yukon is all classed as bituminous, while Alberta produces bituminous, sub-bituminous and lignite, and Saskatchewan and Manitoba lignite only. The division of the 1931 production among these classes is given in Table **26.** The quantity of coal mined annually in six provinces, Yukon and Canada from 1911 to 1932 is shown in Table **22.**

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[1] See map showing the sources of the coal supply of different parts of Canada, p. 386 of 1922-23 Year Book.

22.—Production of Coal in Canada, by Provinces, calendar years 1911-32.

NOTE.—For annual production from 1874 to 1910, by provinces, see 1911 Year Book, p. 419.

Year.	Nova Scotia.	New Brunswick.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Canada.	
								Quantity.	Value.
	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	$
1911....	7,004,420	55,781	-	206,779	1,511,036	2,542,532	2,840	11,323,388	26,467,646
1912....	7,783,888	44,780	-	225,342	3,240,577	3,208,997	9,245	14,512,829	36,019,044
1913....	7,980,073	70,311	-	212,897	4,014,755	2,714,420	19,722	15,012,178	37,334,940
1914....	7,370,924	98,049	-	232,299	3,683,015	2,239 799	13,443	13,637,529	33,471,801
1915...	7,463,370	127,391	-	240,107	3,360,818	2,065,613	9,724	13,267,023	32,111,182
1916 ...	6,912,140	143,540	-	281,300	4,559,054	2,584,061	3,300	14,483,395	38,817,481
1917 ..	6,327,091	189,095	-	355,445	4,736,368	2,433,888	4,872	14,046,759	43,199,831
1918...	5,818,562	268,212	-	346,847	5,972,816	2,568,589	2,900	14,977,926	55,192,896
1919 ...	5,790,196	166,377	-	379,347	4,933,660	2,649,516	-	13,919,096	55,622,670
1920...	6,437,156	171,610	-	335,222	6,907,765	3,095,011	-	16,946,764	82,496,538
1921....	5,734,928	187,192	-	335,632	5,909,217	2,890,291	233	15,057,493	72,451,656
1922....	5,569,072	287,513	-	382,437	5,990,911	2,927,033	465	15,157,431	65,518,497
1923....	6,597,838	276,617	-	438,100	6,854,397	2,823,306	313	16,990,571	72,058,986
1924....	5,557,441	217,121	-	479,118	5,189,729	2,193,667	1,121	13,638,197	53,593,988
1925....	3,842,978	208,012	-	471,965	5,869,031	2,742,252	730	13,134,968	49,261,951
1926...	6,747,477	173,111	-	439,803	6,503,705	2,613,719	316	16,478,131	59 875,094
1927....	7,071,876	203,950	-	470,216	6,934,162	2,746,243	414	17,426,861	61,867,463
1928....	6,743,504	207,738	-	471,713	7,336,330	2,804,594	144	17,564,293	63,757,833
1929 ...	7,056,133	218,706	-	580,189	7,150,693	2,490,378	458	17,496,557	63,065,170
1930 ..	6,252,552	209,349	-	579,424	5,755,528	2,083,818	653	14,881,324	52,849,748
1931 ...	4,955,563	182,181	1,306	662,836	4,564,015	1,876,406	904	12,243,211	41,207,682
1932[1]...	4,684,531	211,055	3,300	875,432	4,867,270	1,681,015	808	11,723,411	37,045,272

[1] Preliminary figures.

The imports of anthracite, bituminous and lignite coal for the calendar years from 1911 to 1932 are given in Table **23**, and the exports of all coal from 1911 to 1932 in Table **24**.

23.—Imports into Canada of Anthracite, Bituminous and Lignite Coal for Home Consumption, calendar years 1911-32.

NOTE.—Anthracite dust is included under anthracite coal. For previous years, see 1911 Year Book, p. 420.

Year.	Anthracite.		Bituminous Coal.		Lignite Coal.		Total.	
	short tons.	$	short tons.	$	short tons.	$	short tons.	$
1911..........	4,020,577	18,794,192	10,538,315	20,498,399	-	-	14,558,892	39,292,591
1912..........	4,184,017	20,080,388	10,411,793	19,397,649	-	-	14,595,810	39,478,037
1913..........	4,642,057	22,034,839	13,559,896	25,914,280	-	-	18,201,953	47,949,119
1914..........	4,435,010	21,241,924	10,286,047	18,559,574	-	-	14,721,057	39,801,498
1915..........	4,072,192	18,753,980	8,393,710	9,591,625	-	-	12,465,902	28,345,605
1916..........	4,570,815	22,216,363	13,009,788	16,073,303	-	-	17,580,603	38,289,666
1917..........	5,320,198	28,109,586	15,537,262	42,452,771	-	-	20,857,460	70,562,357
1918..........	4,785,160	26,007,888	16,893,427	45,642,696	-	-	21,678,587	71,650,584
1919..........	4,937,095	31,595,694	12,356,162	29,565,105	-	-	17,293,257	61,160,799
1920..........	4,982,313	36,773,351	13,861,229	61,260,247	-	-	18,843,542	98,033,598
1921..........	4,553,820	40,293,639	13,748,242	48,631,095	-	-	18,302,062	88,924,734
1922..........	2,705,752	23,795,143	10,317,773	37,387,285	-	-	13,023,525	61,182,428
1923..........	5,165,382	46,457,962	15,822,240	49,899,099	2,331	12,846	20,989,953	96,369,907
1924..........	4,152,558	37,280,910	12,546,214	29,628,643	26,007	117,955	16,724,779	67,027,508
1925..........	3,782,557	32,096,509	12,548,460	26,974,340	18,653	87,832	16,349,670	59,158,681
1926..........	4,192,419	34,202,166	12,376,606	25,511,932	10,423	45,567	16,579,448	59,759,665
1927..........	4,107,854	31,282,371	14,568,671	30,457,884	10,829	44,254	18,687,354	61,784,509
1928..........	3,748,816	27,680,018	13,445,945	26,608,427	10,780	44,247	17,205,541	54,332,692
1929..........	4,019,917	28,809,792	14,170,138	27,140,968	14,108	62,508	18,204,163	56,013,268
1930..........	4,256,090	30,098,910	14,497,955	26,522,765	18,676	72,691	18,772,721	56,694,366
1931..........	3,162,317	21,067,025	9,952,280	15,732,710	6,410	29,603	13,121,007	36,829,338
1932[1]........	3,148,902	19,312,710	8,807,131	12,011,398	3,004	13,701	11,959,037	31,337,809

[1] Preliminary figures.

24.—Exports of Coal, the Produce of Canada, calendar years 1911-32.

NOTE.—For previous years, see 1911 Year Book, p. 421.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	short tons.	$		short tons.	$
1911	1,500,639	–	1922	1,818,582	11,159,060
1912	2,127,133	–	1923	1,654,406	10,661,399
1913	1,562,020	3,951,351	1924	773,246	4,836,848
1914	1,423,126	3,780,175	1925	785,910	4,329,173
1915	1,766,543	5,406,058	1926	1,028,200	5,739,436
1916	2,135,359	7,099,387	1927	1,113,330	5,890,259
1917	1,733,156	7,387,192	1928	863,941	4,469,999
1918	1,817,195	9,405,423	1929	842,972	4,375,328
1919	2,070,050	12,438,885	1930	624,512	3,345,998
1920	2,558,174	18,014,899	1931	359,853	1 909,922
1921	1,987,251	13,896,370	1932[1]	285,487	1,433,036

[1] Preliminary figures.

Coal Consumption.—The sources of the coal consumed in Canada in the calendar years 1911-31 are shown in Table **25**, detailed figures of coal *made available for consumption* during 1931 are given in Table **26**; the difference between the totals of the two tables in the latest year is accounted for by the fact that coal received may be held in bond at Canadian ports and not "cleared for consumption" until required, while coal received in previous years may be taken out of bond (cleared for consumption) in a later year. Normally the coal made available for consumption is greater than the apparent domestic consumption, since coal is landed at Canadian ports and re-exported or ex-warehoused for ships' stores without being taken out of bond, but while remaining in bond at the port it is available for domestic consumption if required.

25.—Annual Consumption of Canadian and Imported Coal in Canada, calendar years 1911-31.

NOTE.—For the years 1886 to 1910, see 1921 Year Book, p. 354.

Calendar Year.	Canadian Coal.[1]		Imported Coal "Entered for Consumption".				Total.	Per capita.
			From U.S.A.	From Great Britain.	Total.[2]			
	short tons.	p.c.	short tons.	short tons.	short tons.	p.c.	short tons.	short tons.
1911	9,822,749	40·5	14,510,129	48,963	14,424,949	59·5	24,247,698	3·365
1912	12,385,696	46·0	14,557,124	38,668	14,549,104	54·0	26,934,800	3·657
1913	13,450,158	42·6	18,145,769	37,825	18,132,387	57·4	31,582,545	4·196
1914	12,214,403	45·5	14,687,853	33,101	14,637,920	54·5	26,852,323	3·490
1915	11,500,480	48·1	12,450,796	15,098	12,406,212	51·9	23,906,692	3·041
1916	12,348,036	41·3	17,576,202	4,401	17,517,820	58·7	29,865,856	3·717
1917	12,313,603	37·2	20,848,009	9,451	20,810,132	62·8	33,123,735	4·049
1918	13,160,731	37·8	21,674,826	3,761	21,611,101	62·2	34,771,832	4·175
1919	11,611,168	40·3	17,292,913	344	17,236,269	59·7	28,847,437	3·402
1920	14,025,566	42·9	18,752,981	–	18,668,741	57·1	32,694,307	3·788
1921	12,715,734	41·1	18,300,081	1,591	18,258,387	58·9	30,974,121	3·524
1922	13,044,352	50·2	12,255,555	765,980	12,962,189	49·8	26,006,541	2·916
1923	15,070,962	41·8	20,417,239	572,570	20,967,971	58·2	36,038,933	4·000
1924	12,529,358	42·8	16,405,344	317,112	16,714,143	57·2	29,243,501	3·199
1925	12,125,290	42·6	15,744,957	604,117	16,331,971	57·4	28,457,261	3·062
1926	15,086,296	47·7	16,204,405	287,299	16,565,555	52·3	31,651,851	3·349
1927	15,944,983	46·7	17,266,434	907,220	18,177,303	53·3	34,122,286	3·541
1928	16,487,807	50·0	15,830,688	682,755	16,515,582	50·0	33,003,389	3·356
1929	16,387,461	48·0	16,780,452	843,502	17,724,132	52·0	34,111,593	3·402
1930	14,052,671	43·3	16,971,933	1,144,861	18,412,039	56·7	32,464,710	3·181
1931	11,682,779	47·7	11,793,798	987,442	12,828,327	52·3	24,511,106	2·362

[1] The sum of Canadian coal mines sales, colliery consumption, coal supplied to employees, and coal used in making coke, etc., less the tonnage of coal exported.

[2] Includes small tonnages from countries other than Great Britain and United States. Deduction- have been made to take account of foreign coal re-exported from Canada and bituminous coal ex-warehoused for ships' stores.

26.—Coal Output, Exports, Receipts from Other Countries and Coal Made Available for Consumption in Canada during 1931 (short tons).

NOTE.—For details by provinces, see the Bureau's report "Coal Statistics for Canada, 1931", p. 24.

Grade of Coal.	Canadian Coal.		Receipts from U.S.A.	Receipts from Great Britain.	Receipts from other Countries.[1]	Coal Made Available for Consumption.
	Output.	Exported.				
	tons.	tons.	tons.	tons.	tons.	tons.
Anthracite	–	–	2,236,423	876,364	65,354	3,178,141
Bituminous	8,861,360	336,302	10,224,982	122,298	–	18,872,338
Sub-bituminous	471,343	–	–	–	–	471,343
Lignite	2,910,508	23,551	6,410	–	–	2,893,367
Totals	**12,243,211**	**359,853**	**12,467,815**	**998,662**	**65,354**	**25,415,189**

[1] Includes 60,762 tons from Germany and 4,592 tons from French East Indies.

World Production.—The total known coal production of the world in 1931 amounted to about 1,230,000,000 long tons, towards which Canada contributed 10,931,438 long tons or about 0·9 p.c. Table **27** shows the production of the British Empire and the chief foreign countries in units of 1,000 long tons during each of the years 1913 and 1921-31.

27.—Coal Production in the Principal Countries of the World, 1913, 1921-31
(000 long tons.)

NOTE.—For corresponding figures for 1914 to 1920, see 1932 Year Book, p. 281.

BRITISH EMPIRE.

Calendar Year.	United Kingdom.	British India.	Canada.	Australia.	New Zealand.	Union of South Africa.
1913	287,431	16,208	13,404	12,418	1,888	9,583
1921	163,251	19,303	13,444	12,878	1,809	10,645
1922	249,607	19,011	13,533	12,299	1,585	9,126
1923	276,001	19,658	15,170	12,634	1,970	11,075
1924	267,118	21,174	12,180	13,885	2,083	11,633
1925	243,176	20,904	11,723	14,503	2,115	12,127
1926	126,279	20,093	14,694	14,208	2,240	12,745
1927	251,232	22,082	15,560	14,978	2,367	12,382
1928	237,763	22,543	15,683	13,432	2,437	12,408
1929	257,907	23,419	15,622	12,106	2,536	12,813
1930	243,882	23,803	13,287	11,363	2,542	12,030
1931	219,459	21,716	10,920	10,600	2,158	10,709

FOREIGN COUNTRIES.

Calendar Year.	Germany.	Belgium.	France.	Czecho-slovakia.	Poland.	Nether-lands.	Japan.	United States.
1913	274,264	22,474	40,188	–	–	1,843	20,973	508,893
1921	255,148	21,401	37,916	32,174	7,717	3,978	25,944	452,139
1922	262,878	20,868	43,118	28,385	24,300	4,525	27,420	425,849
1923	178,191	22,554	46,981	27,380	35,686	5,249	28,633	587,407
1924	239,494	22,986	58,065	35,066	31,793	5,975	29,801	510,369
1925	267,970	22,726	60,034	30,663	28,677	6,943	31,121	519,527
1926	280,656	24,913	65,072	32,491	35,139	8,677	31,089	591,720
1927	299,511	27,130	65,402	33,106	37,560	9,374	33,177	535,625
1928	312,092	27,108	64,501	34,459	40,047	10,941	33,445	514,369
1929	332,560	26,514	67,474	38,465	45,686	11,552	34,479	541,232
1930	284,148	26,982	67,190	33,098	36,968	12,160	31,007	479,385
1931	247,971	26,608	51,280	30,544	37,661	12,818	25,388	390,753

Natural Gas and Petroleum.

Natural Gas.—The production of natural gas increased in value from $1,346,471 in 1910 to $10,289,985 in 1930 but declined to $9,026,754 in 1931. The producing wells in the east are in southwestern Ontario, and near Moncton, N.B. The principal producing fields in Alberta are the Turner Valley (about 35 miles southwest of Calgary), Medicine Hat, Viking (about 80 miles southeast of Edmonton), Redcliff, Foremost (about 6 miles south and east of the town of Foremost), Bow Island and Wetaskiwin. Wainwright is supplied with gas from the Maple Leaf well in the Fabyan field. The quantity of gas sold or used in 1931 was 25,874,723 M cubic feet. Ontario was credited with about 51 p.c. of the total value but only 29 p.c. of the total quantity, while Alberta produced 45 p.c. by value and 69 p.c. of the total quantity. The production by provinces since 1920 is given in Table 28.

28.—Quantity and Value of Natural Gas Produced in Canada, by Provinces, calendar years 1920-32.

(For the years 1892 to 1919 see Mineral Production of Canada, 1928, p. 188.)

Year.	New Brunswick.		Ontario.		Alberta.		Canada.[1]	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M cu. ft.	$	M. cu. ft.	$	M cu. ft.	$	M cu. ft.	$
1920	682,502	130,506	10,529,374	2,920,731	5,633,442	1,181,345	16,845,518	4,232,642
1921	708,743	139,375	8,422,774	3,080,130	4,945,884	1,374,599	14,077,601	4,594,164
1922	753,898	148,040	8,060,114	4,076,296	5,868,439	1,622,105	14,682,651	5,846,501
1923	640,300	126,068	8,128,413	4,066,244	7,191,670	1,692,246	15,960,583	5,884,618
1924	599,972	113,577	7,150,078	3,798,381	7,131,080	1,796,618	14,881,336	5,708,636
1925	639,235	122,394	7,143,962	3,958,006	9,119,500	2,752,545	16,902,897	6,833,005
1926	648,316	128,300	7,764,996	4,409,593	10,794,697	3,019,221	19,208,209	7,557,174
1927	630,755	124,637	7,311,215	4,331,780	13,434,621	3,586,533	21,376,791	8,043,010
1928	660,981	324,344	7,632,800	4,535,312	14,288,605	3,754,466	22,582,586	8,614,182
1929	678,456	333,002	8,586,475	4,959,695	19,112,931	4,684,247	28,378,462	9,977,124
1930	661,975	325,751	7,965,761	5,034,828	20,748,583	4,929,226	29,376,919	10,289,985
1931	655,891	323,184	7,419,534	4,635,497	17,798,698	4,067,893	25,874,723	9,026,754
1932[2]	645,010	317,603	7,244,624	4,544,000	15,985,744	3,820,722	23,875,978	8,682,505

[1] Totals for Canada include a small production in Manitoba.
[2] Figures for 1932 are subject to revision.

Petroleum.—The production of crude petroleum in Canada during 1931 was the greatest on record and amounted to 1,542,573 barrels, as compared with 1,522,220 barrels produced in 1930. Of this production 6,577 barrels came from New Brunswick, 122,365 from Ontario and 1,413,631 from Alberta. Alberta thus produced 92 p.c. of the total for Canada. The Turner Valley field is the principal source of production in Alberta and embraces territory in which a number of productive wells have recently been brought in, beginning with the famous Royalite No. 4 well. The wells in this field give a wet gas from which a very high grade of crude naphtha is separated. The Red Coulée field in southern Alberta near the International Boundary began producing some petroleum in 1929, while a small production has been obtained for a number of years in the Wainwright field, about 120 miles east of Edmonton, where the oil is heavy and of a lower grade. Altogether 109 oil wells were in operation in Alberta at the close of the year 1931, while drilling was in progress on 14 other wells. These drilling operations were distributed over the Turner Valley, Wainwright, Ribstone, Red Coulée and other fields. There was 80,225 feet of well-drilling in addition to some structure test drilling done in Alberta during 1931.

The principal Ontario oil fields are situated in the southwestern peninsula between lake Huron and lake Erie. These fields reached their maximum production in the '90's and have since declined. New Brunswick's small production comes from the Stony Creek field, near Moncton. For the production by provinces in 1931 see Table **5** on p. 346.

29.—Production of Crude Petroleum in Canada, calendar years 1886-1932.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	brl.[1]	$		brl.[1]	$		brl.[1]	$
1886.....	584,061	525,655	1902....	530,624	951,190	1918....	304,741	885,143
1887.....	713,728	556,708	1903....	486,637	1,048,874	1919....	240,466	736,324
1888.....	695,203	713,695	1904....	503,474	935,895	1920....	196,251	822,235
1889.....	704,690	653,600	1905....	634,095	856,028	1921....	187,541	641,533
1890.....	795,030	902,734	1906....	569,753	761,760	1922....	179,068	611,176
1891.....	755,298	1,010,311	1907....	788,872	1,057,088	1923....	170,169	522,018
1892.....	779,753	984,438	1908....	527,987	747,102	1924....	160,773	467,400
1893.....	798,406	874,255	1909....	429,755	559,604	1925....	332,001	1,250,705
1894.....	829,104	835,322	1910....	315,895	388,550	1926....	364,444	1,311,665
1895.....	726,138	1,086,738	1911....	291,092	357,073	1927....	476,591	1,516,043
1896.....	726,822	1,155,647	1912....	243,336	345,050	1928....	624,184	2,035,300
1897.....	709.857	1,011.546	1913....	228,080	406,439	1929....	1,117,368	3,731,764
1898.....	758.391	1,061.747	1914....	214,805	343,124	1930....	1,522,220	5,033,820
1899.....	808.570	1,202,020	1915....	215,464	300,572	1931....	1,542,573	4,211,674
1900.....	710,498	1,151,007	1916....	198,123	392,284	1932[2]....	1,049,253	3,000,886
1901.....	622,392	1,008,275	1917....	213,832	542,239			

[1] The barrel=35 Imp. gal. [2] Preliminary figures.

Subsection 2.—Other Non-Metallic Minerals.

Asbestos.—Canada produces more asbestos than any other country. The value of the annual output of asbestos increased from less than $25,000 in 1880 to $14,792,201 in 1920 and $13,172,581 in 1929. Owing to the current depression production has been curtailed during 1930-32 as will be seen in Table **29.** In 1931 world production according to the estimate of the Imperial Institute amounted to about 248,000 long tons. Canada produced 164,296 short tons (146,693 long tons) valued at $4,812,886, which was close to 60 p.c. of world production in that year. Other chief producers were: Russia, 66,000 long tons; Rhodesia, 21,466 long tons; Union of South Africa, 11,480 long tons and United States, 2,882 long tons.

Quebec.—The Eastern Townships has for many years been the most productive asbestos-mining area in the world. The most important deposits are at Black lake, in Coleraine township; at Thetford and Robertsonville, in Thetford township; at East Broughton, in Broughton township, and at Danville, in Shipton township. The veins of chrysotile asbestos traverse the serpentine in all directions, and as a rule the fibre lies at right angles to the walls of the veins. The veins vary in width from ¼ inch to ½ inch and occasionally fibre has been obtained several inches in length. The fibre is of good quality and well adapted for spinning.

Open-cut methods of mining are those chiefly adopted throughout the Canadian asbestos fields. Nearly all the mining companies have installed machinery for the crushing, fibrizing, screening and grading of the mine product. In addition, 10 plants in Canada manufacture asbestos products, including the following commodities: asbestos paper and mill board; asbestos roofing of all kinds; asbestos rigid shingles; asbestos building materials; asbestos cellular and sponge-felted pipe insulation; insulating sheets and blocks; asbestos brake linings and clutch facings (woven on special looms); and asbestos packings for steam, oil and hydraulic operations.

30.—Production of Asbestos in Canada, calendar years 1909-32.

NOTE.—Figures for the years 1896-1908 are given in the 1911 Year Book, p. 424.

Year.	Production.[1]		Year.	Production.[1]	
	tons.	$		tons.	$
1909	87,300	2,301,775	1921	92,761	4,906,230
1910	102,215	2,573,603	1922	163,706	5,552,723
1911	127,414	2,943,108	1923	231,482	7,522,506
1912	136,301	3,137,279	1924	225,744	6,710,830
1913	161,086	3,849,925	1925	273,524	8,977,546
1914	117,573	2,909,806	1926	279,403	10,099,423
1915	136,842	3,574,985	1927	274,778	10,621,013
1916	154,149	5,228,869	1928	273,033	11,238,360
1917	153,781	7,230,383	1929	306,055	13,172,581
1918	158,259	8,970,797	1930	242,114	8,390,163
1919	159,236	10,975,369	1931	164,296	4,812,886
1920	199,573	14,792,201	1932[2]	122,977	3,039,721

[1] The quantity and value of sand, gravel and rock separated as a by-product in milling asbestos are included in the totals for 1924 and previous years, but are excluded in later years.

[2] Preliminary figures.

Gypsum.—Many large deposits of gypsum occur throughout Canada, but the production is chiefly from Hants, Inverness and Victoria counties, Nova Scotia; Hillsborough, New Brunswick; Paris, Ontario; Gypsumville, Manitoba; and Falkland and Mayook, British Columbia. The Hillsborough deposit of gypsum in New Brunswick is of very high grade. Nearly 50 p.c. of Canada's production is exported in crude forms from the Nova Scotia deposits, which are conveniently situated for ocean shipping and account for about 75 p.c. of the total Canadian production. Production of gypsum in Canada reached its highest point in 1928 with 1,246,368 tons valued at $3,743,648. Production during 1931 was 863,752 tons valued at $2,111,517 and preliminary figures for 1932 are 438,629 tons valued at $1,080,379. The production by provinces during 1931 is shown in Table 5, p. 347.

Salt.—Practically the whole of the production comes from wells located in southwestern Ontario, but the Malagash deposits in Nova Scotia show an increasing production in recent years and some shipments have been made from deposits near McMurray in Alberta, while the first production in Manitoba of commercial importance was recorded in 1932. The deposits of Ontario occur in the Salina formation of Upper Silurian age, in which the beds of the mineral sometimes reach a thickness of 250 feet. The Canadian production during the present century has shown fairly steady growth from 59,428 tons in 1901 to 91,582 in 1911, 164,658 in 1921, 262,547 in 1926 and a high record of 330,264 tons in 1929. Since then production has declined to 259,047 tons valued at $1,904,149 in 1931 (see Tables **2** and **5** of this chapter) and 263,543 tons according to the preliminary figures for 1932.

Section 6.—Production of Clay Products and Other Structural Materials.

Brick and Tile.—Although the brick and tile industry is established in every province of the Dominion, production is naturally greatest near the chief centres of population, that is, in Ontario and Quebec. Here the widespread clays of glacial and post-glacial age occurring over considerable areas of the St. Lawrence Lowlands have furnished the materials for numerous brick and tile industries. Production fluctuates with building activity and reached its highest point in the year 1912. Since that time the gradual substitution of steel and reinforced concrete for brick has reduced the production of brick so that, while the value of construction undertaken in 1928 or 1929 is estimated to have exceeded that of 1912, the quantity of brick produced in the later years was only about half that of 1912. On the other hand, as will be seen from Table **31** below, the production and consumption of cement in 1929 greatly exceeded that of 1912 or 1913. The production of building brick of various types in 1930 and 1931 is shown in Table **2** of this chapter, while the production by provinces in 1931 is given in Table **5.**

Cement.—The cement industry in Canada began with the manufacture of hydraulic or natural rock cement. The first production was probably at Hull, Quebec, between 1830 and 1840. The manufacture of Portland cement began about 1889. Owing to its superiority in uniformity and strength, it soon superseded the older product. Portland cement consists of an accurately proportioned mixture of lime, silica and alumina. The lime is usually furnished by limestone or marl, and the silica and alumina by clay or shale. The cement industry has naturally become established where these materials are situated and where fuel supplies and transportation are readily available. The largest production is in Quebec and Ontario, although there are also active plants in Manitoba, Alberta and British Columbia. As may be seen from Table **31,** while production has declined somewhat since 1929, the industry still shows a healthy recovery from the unfavourable conditions from which it suffered during the War and early post-war periods. Whereas in pre-war years Canada was an importer of Portland cement she is now on balance an exporter of this commodity.

31.—Production, Imports, Exports and Apparent Consumption of Portland Cement, by Quantities and Values, calendar years 1910-32.

Year.	Production.[2]		Imports.		Exports.[3]		Apparent Consumption.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	brl.[1]	$	brl.[1]	$	brl.[1]	$	brl.[1]	$
1910	4,753,975	6,412,215	349,415	468,395	–	12,914	5,103,285	6,867,696
1911	5,692,915	7,644,537	669,532	840,986	–	4,067	6,354,831	8,481,456
1912	7,132,732	9,106,556	1,434,413	1,969,529	–	2,436	8,567,145	11,073,649
1913	8,658,805	11,019,418	254,093	409,303	–	1,736	8,912,898	11,426,985
1914	7,172,480	9,187,924	98,022	147,158	–	2,223	7,270,502	9.332,859
1915	5,681,032	6,977,024	28,190	40,426	–	5,161	5,709,222	7,012,289
1916	5,369,560	6,547,728	20,596	31,621	–	2,424	5,390,156	6,576,925
1917	4,768,488	7,724,246	8,580	19,646	–	16,857	4,777,068	7,727,035
1918	3,591,481	7,076,503	5,913	19,851	–	13,752	3,597,394	7,082,602
1919	4,995,257	9,802,433	14,066	51,314	177,506	465,954	4,831,817	9,387,793
1920	6,651,980	14,798,070	32,963	112,466	835,667	2,193,626	5,849,276	12,716,910
1921	5,752,885	14,195,143	12,057	75,670	242,345	650,658	5,522,597	13,620,155
1922	6,943,972	15,438,481	30,914	83,037	425,137	699,738	6,549,749	14,821,780
1923	7,543,589	15,064,661	17,697	75,294	493,751	824,811	7,067,535	14,315,144
1924	7,498,624	13,398,411	27,672	69,320	153,520	213,845	7,372,776	13,253,886
1925	8,116,597	14,046,704	21,849	63,067	997,915	1,498,495	7,140,531	12,611,276
1926	8,707,021	13,013,283	21,114	77,866	285,932	358,231	8,442,203	12,732,918
1927	10,065,865	14,391,937	19,354	87,541	249,694	308,144	9,835,525	14,171,334
1928	11,023,928	16,739,163	34,047	146,164	267,325	340,624	10,790,650	16,544,703
1929	12,284,081	19,337,235	55,980	189,169	234,111	252,955	12,105,950	19,273,449
1930	11,032,538	17,713,067	143,436	569,848	198,736	212,071	10,977,238	18,070,844
1931	10,161,658	15,826,243	38,392	143,491	114,064	124,267	10,085,986	15,845,467
1932[4]	4,498,721	6,930,721	21,351	58,092	53,333	38,921	4,466,739	6,949,892

[1] The barrel of cement=350 lb. or 3½ cwt. [2] "Production" as used here means quantity and value of sales. [3] Quantities of exports were not recorded prior to 1921 and were insignificant prior to 1919. [4] Preliminary figures.

Stone, Sand and Gravel.—While the Mineral Branch of the Dominion Bureau of Statistics presents details of the production and industrial organization of the stone industry separately from that of sand and gravel, for the sake of brevity they are here discussed together. Production of these materials has increased greatly in recent years and the expansion in the stone industry has been chiefly in crushed stone. Thus a production of crushed stone in 1922 of 3,044,399 tons had increased in 1930 to 8,062,330 tons, while in the same period the production of sand and gravel increased from 11,666,374 tons to 28,547,511 tons, used chiefly for railway ballast, concrete and road work and building sand. The preliminary figures for 1932 for stone are 4,803,910 tons and for sand and gravel, 12,599,706 tons. These figures reflect in general the curtailment of construction activities in 1932. Among the developments in Canada which have resulted in the increased production of these materials prior to the current depression may be mentioned: (1) the tendency for brick to be replaced by reinforced concrete, cement blocks, etc., as indicated above by a decline in brick production and an increase in that of cement; (2) the vast improvement during the past decade in the mileage and character of roads and highways in Canada; and (3) the improvement of railway road-beds.

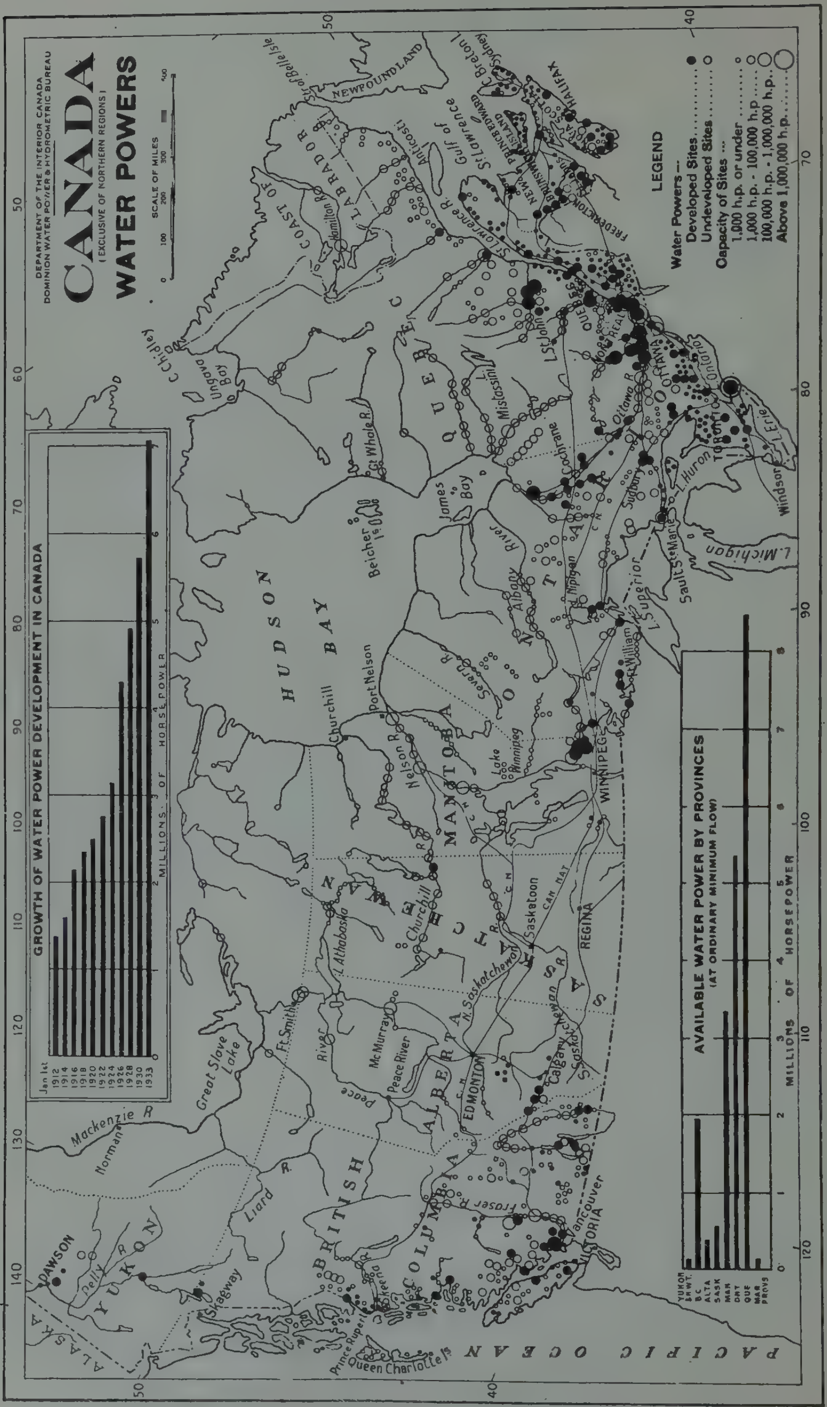
The provincial distribution of the 1931 production of stone, sand and gravel is shown in Table **5**, while the chief purposes for which these materials were produced are shown in Table **32.** The production of sand and gravel came chiefly from Quebec with 35 p.c., Ontario with 34 p.c. and British Columbia with 13 p.c. Of the stone Quebec produced 51 p.c. and Ontario 40 p.c., while Saskatchewan reported no stone production and Alberta less than 0·1 p.c. of the Dominion total.

32.—Production of Sand, Gravel and Stone in Canada, showing the Principal Purposes, calendar years 1929-31.

Material and Purpose.	1929.		1930.		1931.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
Sand—						
Moulding sand	64,457	50,308	43,642	31,768	13,881	9,940
For building, concrete, roads, etc.	2,709,289	1,181,261	3,443,185	1,399,044	3,189,248	1,069,210
Other	335,250	73,265	73,452	21,252	135,395	46,360
Sand and Gravel—						
For railway ballast	11,198,091	1,257,424	6,752,420	961,462	3,593,451	459,531
For concrete, roads, etc	12,555,094	4,087,132	17,409,590	5,569,202	14,352,283	4,784,298
Crushed gravel	984,764	668,424	825,222	362,185	464,328	281,826
Totals, Sand and Gravel	**27,846,945**	**7,317,814**	**28,547,511**	**8,344,913**	**21,748,586**	**6,651,165**
Stone—						
Building	186,249	2,842,701	173,204	4,184,778	129,345	3,717,993
Monumental and ornamental	13,481	282,272	10,744	236,871	11,384	346,410
Limestone for flux	453,597	376,799	384,085	309,676	174,199	133,084
Stone for pulp and paper, sugar and chemical factories	319,036	350,397	202,371	230,858	158,974	180,214
Rubble and riprap	947,073	841,404	1,018,351	706,449	641,037	487,717
Crushed	7,615,636	6,884,857	8,062,330	6,733,137	7,050,261	5,608,166
Totals, Stone[1]	**9,622,424**	**12,066,532**	**9,994,656**[2]	**13,037,209**[2]	**8,397,860**	**11,070,184**

[1] Totals include minor items not specified. [2] Totals include 150 tons of slate valued at $3,000.

The quantities and values of stone produced, given in the table above, represent only the production of those establishments which actually quarry their own stone and are exclusive of the products of the stone-dressing industry comprising those establishments which buy rough stone and dress, polish or finish it; although frequently dressing operations are carried on right at the quarry and to that extent cannot be separated from the primary production. Of the total stone produced in 1931 over 74 p.c. was limestone, 14 p.c. granite, 11 p.c. sandstone and less than 0·3 p.c. marble. The average value per ton was $1.01 for limestone, $2.32 for granite, $1.43 for sandstone and $32.71 for marble. The marble was used chiefly for stucco dash, in pulp and paper mills and as dressed building stone. Of the other three kinds of stone by far the largest part was used as crushed stone.


DEPARTMENT OF THE INTERIOR CANADA
DOMINION WATER POWER & HYDROMETRIC BUREAU
CANADA
(EXCLUSIVE OF NORTHERN REGIONS)
WATER POWERS
SCALE OF MILES
0 100 200 300 400
GROWTH OF WATER POWER DEVELOPMENT IN CANADA
Jan 1st
1912
1914
1916
1918
1920
1922
1924
1926
1928
1930
1933
MILLIONS OF HORSEPOWER
0 1 2 3 4 5 6 7
AVAILABLE WATER POWER BY PROVINCES
(AT ORDINARY MINIMUM FLOW)
YUKON
N.W.T.
B.C.
ALTA
SASK
MAN
ONT
QUE
MAR PROVS
MILLIONS OF HORSEPOWER
0 1 2 3 4 5 6 7 8
LEGEND
Water Powers—
Developed Sites ●
Undeveloped Sites ○
Capacity of Sites—
1,000 h.p. or under
1,000 h.p. - 100,000 h.p.
100,000 h.p. - 1,000,000 h.p.
Above 1,000,000 h.p.
HUDSON BAY
PACIFIC OCEAN
ALASKA
YUKON
DAWSON
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
LABRADOR
NEWFOUNDLAND
NEW BRUNSWICK
NOVA SCOTIA
PRINCE EDWARD ISLAND
EDMONTON
Calgary
Saskatoon
REGINA
WINNIPEG
Vancouver
VICTORIA
Prince Rupert
Queen Charlotte Is.
Skagway
Mackenzie R.
Great Slave Lake
Ft. Smith
Peace River
McMurray
L. Athabaska
Churchill
Port Nelson
Nelson R.
Lake Winnipeg
Severn R.
Albany River
James Bay
Belcher Is.
Gt. Whale R.
Ungava Bay
C. Chidley
Hamilton R.
Anticosti
Gulf of St. Lawrence
St. Lawrence R.
L. Mistassini
L. St. John
Cochrane
Ottawa R.
OTTAWA
MONTREAL
QUEBEC
Sydney
HALIFAX
FREDERICTON
TORONTO
L. Ontario
L. Erie
Windsor
L. Huron
Sudbury
L. Michigan
Sault Ste. Marie
L. Superior
Ft. William
L. Nipigon
Fraser R.
Liard R.
Pelly R.
Norman
Skeena
Str. of Belle Isle
Coast of Labrador
Cape Breton I.
50 60 70 80 90 100 110 120 130 140
40 50

CHAPTER XIII.—WATER POWERS.

The fresh-water area of Canada is officially estimated at 226,979 square miles—an area nearly twice as large as the whole land area of the British Isles, and certainly larger than the fresh-water area of any other country in the world. As many parts of this well-watered country are situated at a considerable height above sea-level, there are great sources of potential energy in the rapids and waterfalls of the rivers conveying the water from these areas to the sea. Water power, therefore, is among the chief natural resources of Canada, and its development has in recent years contributed materially to swell the volume of Canadian production.

This Water Power chapter of the Year Book is divided into three sections: the first describes our water powers, their development and use in industry; the second deals with the Canadian central electric station industry, which is based almost wholly upon hydro-electric power; the third treats of the public ownership of hydro-electric power in Ontario, the chief manufacturing area, and also describes the policies of the Hydro-Electric or Power Commissions in other provinces.

Section 1.—The Water Powers of Canada.[1]

The progress of civilization in its material aspects may be measured by the extent to which the resources of nature are adapted to the uses of mankind. These resources yield, in the first instance, raw materials such as coal and iron, cotton and lumber, hides and wool, which enter into so many things that they are spoken of as basic commodities. Energy, until comparatively recently, was largely secured by the combustion of coal and was therefore looked upon as a secondary product, whereas, when produced from falling water, it is just as much a primary product as coal itself. Energy now enters so largely into the scheme of modern existence that it is recognized as a basic commodity. Statistics concern themselves with kilowatt hours of electrical energy produced just as with the production of pig iron, coal or cotton, and take note of undeveloped water power as being a source of raw material just as important as uncut forests or untapped oil fields. The relationship of power to production is of such vital consequence that every nation, besides considering its own power-producing resources, is deeply interested in the similar resources of other countries and the method of their development. To facilitate a study of world power conditions two Plenary World Power Conferences composed of representatives from 47 member states have already been held to consider the technical, economic and statistical aspects of power development. Arrangements for the future re-convening of such Conferences have been made.

Canada is richly endowed with water-power resources and is in the forefront as regards their utilization. In fact, practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within practical transmission distance substantial reserves for the future. More than 95 p.c. of the total main plant equipment of the central electric stations of Canada is hydro-power, and this equipment generates more than 98 p.c. of the total electrical output. Indeed, water power is a mainspring of industrial progress in the central provinces, which have no indigenous coal supplies. Table 1 shows the provincial distribution of available and developed power in Canada at Jan. 1, 1933.

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[1] By J. T. Johnston, Director, Dominion Water Power and Hydrometric Bureau, Department of the Interior.

1.—Available and Developed Water Power in Canada, by Provinces, Jan. 1, 1933.

Province.	Available 24-hour Power at 80 p.c. Efficiency.		Turbine Installation.
	At Ordinary Minimum Flow.	At Ordinary Six Months' Flow.	
	h.p.	h.p.	h.p.
Prince Edward Island	3,000	5,300	2,439
Nova Scotia	20,800	128,300	112,167
New Brunswick	68,600	169,100	133,681
Quebec	8,459,000	13,064,000	3,357,320
Ontario	5,330,000	6,940,000	2,208.105
Manitoba	3,309,000	5,344,500	390,925
Saskatchewan	542,000	1,082,000	42,035
Alberta	390,000	1,049,500	71,597
British Columbia	1,931,000	5,103,500	713,792
Yukon and Northwest Territories	294,000	731,000	13,199
Canada	**20,347,400**	**33,617,200**	**7,045,260**

The figures of available power in the above table are based upon rapids, falls and power sites of which the actual existent drop, or the head of possible concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or smaller power capacity, not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at points where definite studies have been carried out and the results made matters of record.

The turbine installation in the above table represents the actual water wheels installed throughout the Dominion, but these figures should not be placed in direct comparison with the available power figures for the purpose of deducing therefrom the percentage of the available water-power resources developed to date. The actual water-wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated at ordinary six months' flow. The figures quoted above, therefore, indicate that the "at present recorded water-power resources" of the Dominion will permit of a turbine installation of about 43,000,000 h.p. In other words, the present turbine installation represents less than one-sixth of the present recorded water-power resources.

The above figures may be said to represent the minimum water-power possibilities of the Dominion. To illustrate, detailed analyses of the water-power resources of the provinces of New Brunswick and Nova Scotia have disclosed most advantageous reservoir facilities for regulating stream flow. It is estimated that the two provinces possess within their respective borders 200,000 and 300,000 commercial h.p.

Recent Increase in Turbine Installation.—Table 2 shows the yearly increase in turbine installation, by provinces, from 1900 to 1932 inclusive. During the four years immediately preceding the War nearly 1,000,000 h.p. was installed, during the following eight years approximately the same installation was made, while in the latest ten years the gain was 4,036,915 h.p.

2.—Hydraulic Turbine Horse Power Installed in Canada, by Provinces, as at Dec. 31, 1900-32.

NOTE.—Turbine horse power in Saskatchewan is reported as 30 from 1910 to 1917, 35 from 1918 to 1929, and 42,035 from 1930 to 1932; installation in Yukon was 5 from 1900 to 1906, 2,085 in 1907, 2,095 in 1908, 3,195 in 1909 and 1910, 13,195 from 1911 to 1913 and 13,199 from 1914 to 1932. These figures are included in the totals for Canada.

Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Canada.
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1900...	1,521	19,810	4,601	82,864	53,876	1,000	280	9,366	173,323
1901 ...	1,581	20,132	4,601	139,149	62,788	1,000	280	9,366	238,902
1902 ...	1,641	21,944	4,636	152,783	77,022	1,000	280	13,266	272,577
1903 ..	1,641	23,518	7,427	164,258	79,909	1,000	355	20,346	298,459
1904 ...	1,641	26,228	8,459	179,468	111,697	1,000	355	26,396	355,249
1905.....	1,663	26,563	8,594	183,799	202,896	1,000	355	29,334	454,209
1906.....	1,701	26,952	10,134	205,211	279,028	38,800	355	45,816	608,002
1907...	1,701	27,977	10,172	242,582	345,404	38,800	355	58,570	727,646
1908 ...	1,701	28,419	10,407	269,814	410,079	38,800	655	58,610	820,580
1909 ...	1,734	29,381	10,507	305,556	437,613	38,800	655	63,048	890,489
1910 ..	1,760	31,476	11,197	334,763	490,821	38,800	655	64,474	977,171
1911 ...	1,760	32,226	13,635	468,977	634,263	64,800	14,855	119,393	1,363,134
1912. .	1,785	32,773	15,185	513,635	659,190	64,800	15,035	165,838	1,481,466
1913 ..	1,825	32,964	15,185	551,871	751,545	64,800	32,835	224,680	1,688,930
1914 ..	1,843	33,469	15,380	664,139	858,534	78,850	33,100	252,690	1,951,244
1915 ..	1,942	33,596	15,405	803,786	871,309	78,850	33,110	254,265	2,105,492
1916 ..	1,962	33,656	15,480	836,394	921,158	78,850	33,110	288,330	2,222,169
1917....	1,989	34,051	16,251	856,769	955,955	78,850	33,122	297,169	2,287,385
1918 ...	2,198	34,318	16,311	905,303	981,313	85,325	33,122	307,533	2,378,657
1919....	2,233	35,193	19,126	936,903	1,036,550	85,325	33,122	308,364	2,470,050
1920 ..	2,233	37,623	21,976	955,090	1,057,422	85,325	33,122	309,534	2,515,559
1921 ..	2,252	48,908	30,976	1,050,338	1,165,940	99,125	33,122	310,262	2,754,157
1922 ..	2,274	49,142	42,051	1,099,404	1,305,536	134,025	33,122	329,557	3,008,345
1923 .	2,274	50,331	43,101	1,135,481	1,396,166	162,025	33,122	356,118	3,191,852
1924 ...	2,274	65,572	44,521	1,312,550	1,595,396	162,025	34,532	360,492	3,590,596
1925 ..	2,274	65,637	42,271	1,749,975	1,802,562	183,925	34,532	443,852	4,338,262
1926 ..	2,274	66,147	47,131	1,886,042	1,808,246	227,925	34,532	463,852	4,549,383
1927....	2,274	68,416	47,131	2,069,518	1,832,655	255,925	34,532	475,232	4,798,917
1928 ..	2,439	74,356	67,131	2,387,118	1,903,705	311,925	34,532	554,792	5,349,232
1929 ...	2,439	109,124	112,631	2,595,430	1,952,055	311,925	70,532	559,792	5,727,162
1930 ...	2,439	114,224	133,681	2,718,130	2,088,055	311,925	70,532	630,792	6,125,012
1931....	2,439	111,999	133,681	3,100,330	2,145,205	390,925	70,532	655,992	6,666,337
1932 ..	2,439	112,167	133,681	3,357,320	2,208,105	390,925	71,597	713,792	7,045,260

Distribution of Developed Water Power.—An analysis is made in Table 3 of the distribution of developed water power among central electric stations, pulp and paper-mills and other industries. The extent to which pulp and paper manufacturing is dependent on water power is clearly shown by the figures below, which indicate that 8·5 p.c. of the developed power is installed by pulp and paper companies, in comparison with 4·7 p.c. developed by all other industries (excluding central electric stations). The pulp and paper industry also purchases a large amount of power from the central electric stations, and about 90 p.c. of its machinery is driven by water power. The bulk of the water power used in other industries is developed by central electric stations, converted into electricity and delivered to the various industrial plants.

During the past five years, 1928 to 1932 inclusive, 2,246,343 h.p., or almost 32 p.c. of Canada's present total installation of 7,045,260 h.p., was installed. While no new developments of any considerable size were initiated during 1932, construction is continuing upon several large undertakings which will add materially to this total during 1933 and subsequent years.

3.—Developed Water Power in Canada: Distribution, by Provinces and Industries, and per 1,000 Population, as at Jan. 1, 1933.

NOTE.—The figures in this table are preliminary and are subject to correction when official data are complete.

Province.	Turbine Installation.				Estimated Population June 1, 1932.[4]	Total Installation per 1,000 Population.
	In Central Electric Stations.[1]	In Pulp and Paper-Mills.[2]	In Other Industries.[3]	Total.		
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
Prince Edward Island	376	–	2,063	2,439	88,000	28
Nova Scotia	84,202	12,378	15,587	112,167	513,000	219
New Brunswick	104,960	19,778	8,943	133,681	409,000	327
Quebec	2,998,875	222,160	136,285	3,357,320	2,904,000	1,156
Ontario	1,872,823	240,880	94,402	2,208,105	3,459,000	638
Manitoba	390,925	–	–	390,925	705,000	554
Saskatchewan	42,000	–	35	42,035	971,000	43
Alberta	70,320	–	1,277	71,597	740,000	97
British Columbia	547,160	105,800	60,832	713,792	704,000	1,014
Yukon and Northwest Territories	–	–	13,199	13,199	13,000	1,015
Canada	**6,111,641**	**600,996**	**332,623**	**7,045,260**	**10,506,000**	**670**

[1] Includes only hydro-electric stations which develop power for sale. [2] Includes only water power *actually developed* by pulp and paper companies. In addition to this total, pulp and paper companies have motor equipment for operation by hydro-electricity purchased from central electric stations aggregating more than 1,007,000 h.p., making a total of more than 1,608,000 h.p. actually developed for the manufacture of pulp and paper. A considerable amount of off-peak power and surplus power is also purchased for use in electric boilers. [3] Includes only water power *actually developed* in connection with industries other than the central electric station and pulp and paper industries. These industries also purchase power from central electric stations. [4] As estimated by the Dominion Bureau of Statistics.

Section 2.—Central Electric Stations.[1]

The rapid growth of the central electric station industry has been stimulated by the large demand for power from the manufacturing industries, particularly pulp and paper plants, and from the domestic and commercial light customers, and also by the many improvements in generating and transmitting equipment and in electric appliances and motors. In Table 4 will be found statistics of the number of central electric stations, capital invested, revenue from sale of power, total horsepower, kilowatt hours generated and number of customers for the 15 years ended 1931, together with the number of persons employed and the amount expended for salaries and wages. The total output for 1931 amounted to 16,330,867,000 kilowatt hours and, based on preliminary figures from the large stations, the total production in 1932 is estimated at 15,986,000,000 kilowatt hours, the decrease in the output of 344,867,000 kilowatt hours being more than accounted for in the exports to the United States, which declined by 667,879,000 kilowatt hours.

Large quantities of surplus, or off-peak, power were exported to the United States from the Niagara plants in 1930, but owing to industrial inactivity in Buffalo and contiguous municipalities the requirements for imported power so diminished that the export of off-peak power dropped from 402 millions in 1930 to 170 millions in 1931 and to less than one-quarter of a million kilowatt hours in 1932.

The rapid increase in the production of electric energy by central electric stations is largely due to the growth of the pulp and paper industry. In 1924 the central electric stations supplied power to motors in the pulp and paper mills with a total rating of 315,464 h.p. or 12·4 p.c. of all power equipment in manufacturing industries (the central electric station industry excluded). In 1930 this had increased to 993,024 h.p. or to 24·4 p.c. of the total power equipment in manufactures. Also the pulp and paper industry has been using an increasing amount of electricity for heating water. The capacity of electric boilers in this industry in 1931 was rated at 88,345 h.p. and the consumption of electric energy in these boilers amounted to 2,032,000,000 kilowatt hours. In pulp and paper mills practically all the electric energy is used 24 hours per day throughout the year, as against an average working day for other manufactures of 8 to 9 hours. Although the low rates are important factors in increasing the average consumption per capita for all purposes to 1,450 kilowatt hours (excluding exports), which is more than twice the average in the United States and over seven times the average in Great Britain, the large consumption by the pulp and paper industry, by mines and by electro-chemical industries are also important factors.

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[1] Revised by G. S. Wrong, B.Sc., Chief, Transportation and Public Utilities Branch, Dominion Bureau of Statistics. For a list of publications of this Branch see Chapter XXIX.

There are some interesting factors affecting the relative per capita consumptions of electricity from central electric stations in Canada and the United States. An abundant supply of low-priced coal in the industrial area of the United States, and no coal but an excellent supply of water power in the central provinces of Canada, tend to favour the generation of power in central stations in Canada more than in the United States. Again, the pulp and paper industry is proportionately a smaller industry in the United States than in Canada; on a power basis, the proportions are approximately 7 p.c. and 40 p.c. respectively. While the average consumption for domestic use is more than twice as high in Canada as in the United States, the total consumption for domestic or residential use is about 9·5 p.c. of the total output of central electric stations for Canada and 14 p.c. for the United States.

4.—Summary of Statistics of Central Electric Stations, calendar years 1917-31.

Year.	Number of Stations.[1]	Capital Invested.	Revenue from Sale of Power.[2]	Total Horse Power.[3]	Kilowatt Hours Generated.	Customers.	Persons Employed.	Salaries and Wages.
		$	$	h.p.	(000).	No.	No.	$
1917	666	356,004,168	-	1,844,571	-	-	8,847	7,777,715
1918	795	401,942,402	43,908,085	1,841,114	-	-	9,696	10,354,242
1919	805	416,512,010	47,933,490	1,907,135	5,497,204	-	9,656	11,487,132
1920	506	448,273,642	53,436,082	1,897,024	5,894,867	894,158	10,693	14,626,709
1921	510	484,669,451	58,271,622	1,977,857	5,614,132	973,212	10,714	15,234,678
1922	522	568,068,752	62,173,179	2,258,398	6,740,750	1,053,545	10,684	14,495,250
1923	532	581,780,611	67,496,893	2,423,845	8,099,192	1,112,547	11,094	14,784,038
1924	532	628,565,093	74,616,863	2,849,450	9,315,277	1,200,950	12,956	17,946,584
1925	563	726,721,087	79,341,584	3,569,527	10,110,459	1,279,731	13,263	18,755,907
1926	595	756,220,066	88,933,733	3,769,323	12,093,445	1,337,562	13,406	19,943,000
1927	629	866,825,285	104,033,297	4,173,349	14,549,099	1,381,966	14,708	22,946,315
1928	601	956,919,603	112,326,819	4,627,667	16,336,518	1,464,005	15,855	24,253,820
1929	587	1,055,731,532	122,883,446	4,925,555	17,961,840	1,555,883	16,164	24,831,821
1930	587	1,138,200,016	126,038,145	5,401,108	18,093,802	1,607,766	17,857	27,287,443
1931	559	1,229,988,951	122,310,730	5,706,757	16,330,867	1,632,792	17,014	26,306,956

[1] Excluding non-generating stations in 1920 and subsequent years. [2] Revised to exclude duplications.
[3] Not including auxiliary plant equipment which is included in installation shown in central electric stations in Table 7 of the manufactures chapter, pp. 428 and 429.

Equipment of Central Electric Stations.—The main-plant primary power equipment of all central electric stations aggregated 5,706,757 h.p. in 1931. This included water wheels and turbines, steam reciprocating engines and turbines and internal combustion engines. The hydraulic power machines greatly predominated over the other prime movers, providing 95 p.c. of the total capacity, with steam turbines, steam reciprocating engines and internal combustion engines making up the remaining 5 p.c. Not included in the above were steam engines and internal combustion engines with a capacity of 184,043 h.p., or 2·9 p.c. of the total power capacity, installed as auxiliary or standby equipment.

Central electric stations that have no water power, but are operated by steam and internal combustion engines, are on the whole small stations. Of the 66 main-plant steam reciprocating engines in central electric stations in 1931, only 12 in number, or about 18 p.c., were over 500 h.p. The steam turbines averaged over 3,620 h.p. with 15 units averaging 9,600 h.p., but there were only 66 steam turbines in the industry and these were confined to 27 stations, whereas the 790 water wheels and turbines averaged 6,860 h.p.

The majority of the fuel-using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the Prairie Provinces bituminous and lignite coals are used for the steam engines, and gasolene, oil distillates and producer gas for the internal combustion engines.

Of the 317 main-plant internal combustion engines in central electric stations in 1931, 185, or 58 p.c., were in Saskatchewan, 51, or 16 p.c., in Alberta and 34, or 11 p.c., in Manitoba.

During 1931, the fuel stations produced 295,064,000 kilowatt hours at a cost for fuel of $1,789,634, an average of 0·61 ct. per kilowatt hour. This production was, however, only 1·8 p.c. of the total output. The auxiliary equipment in central stations consumed fuel valued at $102,618 and produced 10,469,000 k.w. hours.

5.—Equipment of Central Electric Stations, 1931.

NOTE.—K.V.A. means Kilo-volt-amperes.

Province.	Number of Power Plants.	Water Wheels and Turbines.			Steam Engines, Steam Turbines and Internal Combustion Engines.			Dynamos.		
		No.	Capacity.	Average Capacity.	No.	Capacity.	Average Capacity.	No.	Capacity.	Average Capacity.
			h.p.	h.p.		h.p.	h.p.		K.V.A.	K.V.A.
MAIN PLANT EQUIPMENT.										
Prince Edward Island	11	9	464	52	8	5,063	633	16	4,929	308
Nova Scotia	48	52	80,007	1,539	33	46,342	1,404	84	102,101	1,215
New Brunswick	19	16	105,485	6,593	22	21,275	967	39	107,477	2,756
Quebec	96	254	2,513,542	9,896	5	4,886	977	263	2,159,741	8,212
Ontario	125	336	1,774,121	5,280	8	938	117	337	1,436,989	4,264
Manitoba	28	37	376,925	10,187	49	9,470	193	82	306,401	3,737
Saskatchewan	119	–	–	–	213	135,026	634	211	114,776	544
Alberta	56	18	69,520	3,862	83	58,827	709	96	104,677	1,090
British Columbia Yukon	57	68	502,255	7,386	28	2,611	93	99	390,285	3,942
Totals	**559**	**790**	**5,422,319**	**6,864**	**449**	**284,438**	**633**	**1,227**	**4,727,376**	**3,853**
AUXILIARY PLANT EQUIPMENT.										
Totals	–	–	–	–	**127**	**184,043**	**1,449**	**117**	**157,221**	**1,344**

Provincial Distribution of Electrical Energy.—The distribution by provinces of the electrical energy generated in central electric stations throughout Canada is shown in Table **6** for the calendar years 1927-31. In the latter year about 80 p.c. of the total generated electrical energy was produced in the leading industrial provinces of Ontario and Quebec. From Table **7** it is seen that the total of electric energy generated for export in the fiscal year ended Mar. 31, 1932, was 1,008,398,958 kilowatt hours; in the calendar year 1931 it had amounted to 1,281,653,817 kilowatt hours, or 7·8 p.c. of the total amount generated in central electric stations.

6.—Electrical Energy Generated in Central Electric Stations, by Provinces, calendar years 1927-31.

Province.	Kilowatt hours ("000" omitted).				
	1927.	1928.	1929.	1930.	1931.
Prince Edward Island	2,017	2,289	2,726	3,591	4,413
Nova Scotia	83,695	97,448	107,467	223,421	257,573
New Brunswick	53,095	73,846	125,267	332,598	404,350
Quebec	6,523,605	7,682,425	8,664,334	8,822,901	8,066,026
Ontario	5,792,820	6,064,031	6,453,510	6,160,987	4,948,819
Manitoba	875,897	1,050,898	1,108,192	991,237	1,084,763
Saskatchewan	85,603	98,971	119,455	137,217	134,014
Alberta	156,066	181,272	205,351	204,076	205,082
British Columbia	967,895	1,074,818	1,176,213	1,217,774	1,225,827
Yukon	8,406	11,806			
Canada	**14,549,099**	**16,337,804**	**17,962,515**	**18,093,802**	**16,330,867**

Electric Light and Power.—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the production of electrical energy for export is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until Sept. 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. (See cc. 54 and 55, R.S.C., 1927.)

Electrical energy produced for export increased from 538,331,425 kilowatt hours in the fiscal year ended Mar. 31, 1911, to 1,749,539,778 kilowatt hours in 1931 but fell to 1,008,398,958 kilowatt hours in 1932. Figures by companies for the last four fiscal years are given in Table 7.

7.—Electrical Energy Generated or Produced for Export under Authority of the Electricity and Fluid Exportation Act, fiscal years ended Mar. 31, 1929-32.

Company.	1929.	1930.	1931.	1932.
	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.
Hydro-Electric Power Commission of Ontario	797,626,900	710,680,300	857,358,400	395,413,700
Canadian Niagara Power Co., Niagara Falls, Ont	328,903,966	303,809,900	338,183,620	253,816,000
Ontario and Minnesota Power Co., Fort Frances, Ont.	17,264,700	13,244,300	9,883,600	10,014,700
Maine and New Brunswick Electric Power Co., Ltd., Aroostook Falls, N.B	10,164,151	11,169,874	12,922,510	12,552,505
British Columbia Electric Ry. Co., Vancouver, B.C.	807,572	641,586	16,840[2]	146,606
Western Power Co. of Canada, Vancouver, B.C	611,365	14,408	2,506	5,951
Southern Canada Power Co., Sherbrooke, Que	610,608	416,832	463,870	436,180
Cedars Rapids Mfg. and Power Co., Cedars Rapids, Que	443,604,762	448,396,462	521,117,775	326,106,398
West Kootenay Power and Light Co., Ltd., Rossland, B.C	551,100	–	–	–
International Electric Co., Ltd., Stewart, B.C	69,330	–	–	–
Maritime Electric Co., Ltd., St. Stephen, N.B	765,522	869,296	561,000	318,850
Fraser Companies, Ltd	3,232,300	6,788,200	7,905,570	8,218,900
Northport Power and Light Co., Northport, Wash., U.S.A.[1]	–	317,128	268,587	271,490
Northern British Columbia Power Co., Prince Rupert, B.C	–	40,329	52,630	59,760
International Railway Co., Niagara Falls, Ont	–	717,774	718,470	553,418
Detroit and Windsor Subway Co	–	–	84,400	484,500
Totals	**1,604,212,276**	**1,497,103,389**	**1,749,539,778**	**1,008,398,958**

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[1] Purchases from West Kootenay Power and Light Co., Ltd., Rossland, B.C.

[2] No exports March 1930 to January, 1931, inclusive.

Section 3.—Public Ownership of Hydro-Electric Power.

When, in the early years of the twentieth century, it became evident that the development of hydro-electric power would become a 'key industry' in Canada, more especially in its coal-less central provinces of Ontario and Quebec, a strong movement arose in favour of conserving the water powers of the country for the public benefit instead of allowing them to pass into the hands of private corporations. This 'public ownership' movement developed especial strength in Ontario and finally led to the establishment of the Hydro-Electric Power Commission, the operating statistics of which are given below. In more recent years, Manitoba, Nova Scotia, New Brunswick and Saskatchewan have established Hydro-Electric Commissions on the model of the Ontario system. In Quebec and British Columbia, on the other hand, the development of hydro-electric power has been left in the hands of private corporations.

Subsection 1.—The Hydro-Electric Power Commission of Ontario.[1]

The publicly-owned hydro-electrical undertaking of Ontario—known in the province as the "Hydro"—is an organization of a large number of partner municipalities, co-ordinated into groups or systems for securing common action with respect to power supplies. It had its beginning in 1903, when, as a result of public agitation to ensure the provision of adequate supplies of electrical power for distribution throughout the province at low cost, seven municipalities united under statutory authority in appointing an investigating commission to deal with power problems. This commission, known as the Ontario Power Commission, completed its work in 1906, and in the same year the Ontario Government, by special Act, created the present Hydro-Electric Power Commission of Ontario. The operations of the undertaking have grown rapidly and in 1931 electrical service was supplied by the Commission to about 720 municipalities, comprising nearly all of the cities and towns of the province, as well as many small communities and rural areas.

The providing of the power, either by generation or purchase, its transformation, transmission and delivery to the individual municipalities and to large industrial consumers, and the operation of rural power districts are carried on by the municipalities acting *collectively* through their agent and trustee, the Hydro-Electric Power Commission of Ontario. The local operations involved in the retail distribution of the electrical energy to the consumers within the limits of the various urban municipalities are performed by the municipalities *individually* through municipal utility commissions acting under the general supervision of the Hydro-Electric Power Commission.

Capital required for plant to generate and transmit power is lent by the province, and the municipalities are under contract to repay, over a period of 40 years, the moneys thus lent, with interest in full. The local distribution systems are financed individually by the issue of municipal debentures. Provision is made, in the rates charged to the ultimate consumers, for revenue with which to retire these bonds in from 20 to 30 years. The rates at which power is supplied by the Commission to the various municipalities vary with the amounts of power used, the distances from the sources of supply, and other factors. The basic principle underlying the operations of the undertaking is the provision of service 'at cost'. The rates charged by the municipal utilities for retail service are under the control of the

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[1] Revised by Arthur V. White, Consulting Engineer of the Hydro-Electric Power Commission of Ontario, Toronto, Ontario.

Commission and are designed to ensure that each class of consumer bears its appropriate share of the expenses of the undertaking. Each type of consumer is charged with the cost of the service he receives as far as is practicable.

Power Supplies.—To meet the constantly expanding power demands of the undertaking, the Commission has constructed its own generating plants, has made long-term contracts for the purchase of power from other organizations, and has acquired several privately-owned generating plants. Of the 38 hydro-electric power plants operated by the Commission in 1931, the largest is the Queenston-Chippawa development on the Niagara river which was constructed by the Commission and has a normal operating capacity of 525,000 h.p. Provision for the needs of the near future had been made at the end of 1931—including existing plants, plants under construction and power under contract for present and future delivery—up to an aggregate of about 2,000,000 h.p.

Hydro-Electric Power Commission Statistics.—The Canada Year Book of 1910 (p. xliii) described the turning on, Oct. 11, 1910, at Berlin (now Kitchener), Ontario, of electrical energy generated by Niagara falls. The small initial load of less than 1,000 h.p. increased rapidly and by 1915 had reached 100,000 h.p. In 1920 the total power distributed exceeded 350,000 h.p. and in 1930 it was over 1,260,000 h.p. Table 8 shows the growth of the co-operative municipal electrical undertaking of Ontario. It will be noted that the total capital of the undertaking, which includes investments of the Hydro-Electric Power Commission in power-producing and transmitting equipment, etc., and investments of the municipalities in distributing systems and other assets, aggregated about $373,000,000 in 1931.

8.—Summary Statistics Representative of the Growth of the Ontario Hydro-Electric Power Commission's Undertaking, 1910-31.

Year.	Municipalities Served.	Customers Served.	Total Power Distributed by Commission.	Capital of Commission and Assets of Municipal Utilities.
	No.	No.	h.p.	$
1910	10	–	2,500	2,521,000
1911	26	–	15,200	4,020,000
1912	36	–	31,000	4,576,000
1913	58	58,961	45,000	17,698,000
1914	95	96,744	77,000	25,023,000
1915	131	116,892	104,000	29,791,000
1916	191	155,052	167,000	34,917,000
1917	215	181,711	333,000	74,701,000
1918	236	194,382	316,000	87,812,000
1919	252	230,472	328,000	103,591,000
1920	266	261,582	355,000	128,334,000
1921	301	285,923	529,000	193,918,000
1922	348	364,988	605,000	220,594,000
1923	393	387,983	685,486	236,023,000
1924	418	415,922	691,198	254,189,000
1925	444	439,702	816,295	265,998,000
1926	501	448,241	928,032	274,972,000
1927	530	469,572	949,700	286,165,000
1928	560	522,770	1,032,500	297,204,000
1929	607	552,321	1,136,689	314,237,000
1930	668	586,267	1,263,512	359,648,000
1931	721	600,297	1,050,903	373,010,000

Table 9 shows the growth in load in the various systems during the past five years.

9.—Distribution of Power to Systems of the Ontario Hydro-Electric Power Commission, 1927-31.

(20-minute peak horse-power—System, coincident peaks.)

System and District.	October, 1927.	October, 1928.	October, 1929.	October, 1930.	October, 1931.
	h.p.	h.p.	h.p.	h.p.	h.p.
Niagara system	810,322	879,357	949,732	1,000,670	805,630
Dominion Power and Transmission	–	–	–	58,579	48,659
Georgian Bay system	19,247	20,082	22,118	23,355	26,356
Eastern Ontario system [1]	–	–	62,035	88,678	85,857
Central Ontario district	43,458	47,493	[1]	[1]	[1]
St. Lawrence district	8,246	9,896	[1]	[1]	[1]
Rideau district	3,290	3,351	[1]	[1]	[1]
Ottawa district	18,480	20,241	22,079	[1]	[1]
Thunder Bay system	43,603	48,910	77,117	73,968	51,600
Northern Ontario system—					
Nipissing district	3,054	3,170	3,599	3,745	3,689
Sudbury district	–	–	–	12,935	27,200
Patricia district	–	–	–	1,582	1,912
Totals	**949,700**	**1,032,500**	**1,136,689**	**1,263,512**	**1,050,903**

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[1] In 1929 the Eastern Ontario system was formed as a consolidation of the Central Ontario and Trent, the St. Lawrence and the Rideau systems, and in 1930, the Ottawa and the Madawaska systems were also included. These former systems are now called districts.

The initial capital expenditure to serve some twelve municipalities amounted to about $3,600,000. Table **10** shows for the past five years the capital investment in the respective systems of the undertaking and in the associated municipal undertakings.

10.—Capital Investments in Ontario's Hydro Undertakings, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Investments by Commission on behalf of co-operating municipalities, in generating plants and transmission systems, etc.—					
Niagara system	157,273,133	161,994,024	168,004,159	176,172,588	182,176,762
Dominion Power and Transmission	–	–	–	21,489,435	21,489,435
Chats Falls development	–	–	–	2,137,230	4,835,703
Georgian Bay system	5,315,626	5,546,340	6,310,035	7,940,667	8,203,446
Eastern Ontario system [1]	–	–	18,045,388	20,917,183	21,570,767
Transmission lines [2]	–	895,237	–	–	–
Central Ontario district	14,260,456	14,157,631	[1]	[1]	[1]
St. Lawrence district	1,328,384	1,852,166	[1]	[1]	[1]
Rideau district	1,173,928	1,189,021	[1]	[1]	[1]
Ottawa district	143,441	201,331	537,194	[1]	[1]
Madawaska district	–	–	1,864,647	[1]	[1]
Thunder Bay system	14,144,680	14,332,937	15,325,411	17,645,796	18,406,363
Northern Ontario system [3]	–	–	1,565,754	3,297,543	5,259,256
Nipissing district [4]	1,054,488	1,151,371	[4]	[4]	[4]
Hydro-electric railways	6,696,523	6,989,347	7,259,997	7,340,565	1,897,838
Office and service buildings, construction plant, inventories, etc	2,974,120	2,908,076	3,170,051	3,652,772	3,735,970
Miscellaneous, engineering, storage, etc	7,288	–	–	–	–
Total Investments by Commission.	**204,372,067**	**211,217,481**	**222,082,637**	**260,593,779**	**267,575,540**
Investments by municipalities in distributing systems and other assets (exclusive of sinking fund equity in H.E.P.C. systems, included above), all systems.	81,792,678	85,986,288	92,154,281	99,054,262	105,434,582
Grand Totals	**286,164,745**	**297,203,769**	**314,236,918**	**359,648,041**	**373,010,122**

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[1] See footnote 1, Table **9**. [2] Subsequently included in Eastern Ontario system. [3] The Northern Ontario system includes the Nipissing district, the Sudbury district and the Patricia district. [4] The Nipissing district of the Northern Ontario system is, for purposes of certain financial administration, associated with the districts of the Eastern Ontario system.

The total reserves of the Commission and of the municipal electric utilities for sinking fund, renewals, contingencies and insurance purposes are shown in Table **11.**

11.—Accumulated Reserves of the Ontario Hydro-Electric Power Commission and of the Local Electric Utilities of the Co-operating Municipalities, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Niagara system	23,673,223	28,989,376	35,940,823	43,069,032	48,503,212
Georgian Bay system	1,379,191	1,417,747	1,655,366	1,889,782	2,197,526
Eastern Ontario system[1]	–	–	3,447,044	4,123,718	4,865,154
Central Ontario district	2,105,281	2,539,212	[1]	[1]	[1]
St. Lawrence district	333,996	379,505	[1]	[1]	[1]
Rideau district	212,548	258,861	[1]	[1]	[1]
Ottawa district	12,556	14,498	24,734	[1]	[1]
Thunder Bay system	612,548	954,006	1,566,521	2,165,992	2,597,317
Northern Ontario system[3]	–	–	–	10,583	86,942
Nipissing district[4]	145,693	182,416	[4]	[4]	[4]
Bonnechère storage	11,201	13,775	16,451	19,234	–
Service buildings and equipment	465,903	499,138	542,755	570,210	616,737
Hydro-electric railways	156,332	140,804	133,298	102,952	98,729
Insurance—Workmen's Compensation and staff pension insurance	1,820,546	2,156,246	2,554,759	2,993,347	3,438,795
Total reserves of the Commission	30,929,018	37,545,584	45,881,750	54,944,850	62,404,412
Total reserves—including surplus—of municipal electric utilities	34,505,522	38,735,346	44,058,573	48,912,833	53,235,314
Totals, Commission and Municipal Reserves	**65,434,540**	**76,280,930**	**89,940,324**	**103,857,683**	**115,639,726**

For footnotes see footnotes to Table **10.**

Statistics of Urban Municipal Electric Utilities of Ontario Supplied by the Commission.—The Commission exercises supervisory functions over the electrical utilities owned and operated by the partner municipalities, and has introduced a uniform accounting system which enables the Commission to present in its Annual Reports consolidated balance sheets and operating reports regarding these utilities. These statistics relate to about 90 p.c. of the retail customers supplied by the undertaking. Summary statistics regarding service to rural consumers are given in Table **14,** p. 396.

Statistics of the assets and liabilities of the electric departments of urban municipalities served by the Hydro-Electric Power Commission are given in Table **12.** These show, for 1931, total assets of $125,537,858, as compared with liabilities of $52,199,268. Of the difference, $35,544,455 is allotted as reserves, leaving a surplus of $37,794,135. The item "Equity in Hydro Systems", listed under both assets and reserves, relates to the sinking fund equity acquired by the individual municipalities in their collective generation and transmission undertaking administered by the Hydro-Electric Power Commission. All other items relate to the local distributing systems operated individually by the urban municipalities which are partners in the Hydro undertaking. In computing the percentage of net debt to total assets the equity in Hydro systems is not taken into account. It will be noted that whereas between 1927 and 1931 total assets have increased by $33,601,974, total liabilities have increased by only $4,912,112.

12.—Consolidated Statement of Assets, Liabilities, Reserves and Surplus of Electric Departments of Urban Municipalities Served by the Hydro-Electric Power Commission of Ontario, calendar years 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
Number of Municipalities Included	252	256	260	267	275
	$	$	$	$	$
Assets—Plant—					
Lands and buildings	6,486,427	7,024,647	7,469,451	7,936,974	8,407,664
Substation equipment	15,088,905	16,866,186	18,102,792	19,485,056	21,013,957
Distribution system—overhead	16,689,462	17,688,051	18,108,017	19,220,327	19,918,356
Distribution system—underground	3,278,383	3,559,288	4,823,370	4,932,189	5,361,627
Line transformers	5,985,521	6,549,674	7,312,742	7,953,090	8,649,875
Meters	6,346,661	6,839,803	7,405,479	7,840,948	8,106,203
Street lighting equipment—regular	1,399,314	1,486,646	1,594,183	1,780,786	2,205,613
Street lighting equipment—ornamental	1,184,036	1,203,707	1,458,350	1,520,891	1,456,743
Miscellaneous construction expenses	3,360,671	3,394,627	3,483,488	3,996,748	3,827,132
Steam or hydraulic plant	607,320	619,881	489,097	139,587	458,374
Old plant	5,095,556	5,032,089	5,093,379	5,322,690	7,146,438
Totals, Plant	65,522,256	70,264,599	75,340,348	80,129,286	86,551,982
Other Assets—					
Bank and cash balance	3,014,832	1,342,367	858,734	2,722,250	2,738,320
Securities and investments	1,696,238	1,837,140	2,001,089	1,909,439	1,999,846
Accounts receivable	3,715,771	4,097,446	4,683,202	4,481,007	3,957,973
Inventories	1,412,729	1,220,186	1,365,033	1,242,995	1,276,531
Sinking fund on local debentures	6,398,910	7,071,274	7,753,614	8,396,256	8,735,051
Equity in Hydro systems	10,143,206	12,326,098	14,754,865	17,346,372	20,103,276
Other assets	31,942	153,275	152,261	173,030	174,879
Totals, Assets	**91,935,884**	**98,312,385**	**106,909,146**	**116,400,635**	**125,537,858**
Liabilities—					
Debenture balance	42,891,362	42,597,176	42,930,128	45,091,808	44,594,400
Accounts payable	2,988,622	3,074,634	3,132,145	3,001,186	5,382,306
Bank overdraft	252,362	253,144	412,057	405,663	312,576
Other liabilities	1,154,810	1,258,610	1,621,378	1,642,772	1,909,986
Totals, Liabilities	**47,287,156**	**47,183,564**	**48,095,708**	**50,141,429**	**52,199,268**
Reserves—					
For equity in H.E.P.C. system	10,143,206	12,326,097	14,754,865	17,346,372	20,103,276
For depreciation	10,319,889	11,140,796	11,911,155	12,885,388	13,748,049
Other reserves	1,002,917	1,117,258	1,437,371	1,574,656	1,693,130
Totals, Reserves	**21,466,012**	**24,584,151**	**28,103,391**	**31,806,416**	**35,544,455**
Surplus—					
Debentures paid	6,648,767	7,928,907	9,194,253	10,728,279	13,150,040
Local sinking fund	6,398,910	7,071,274	7,962,121	8,396,255	8,735,051
Additional operating surplus	10,135,039	11,544,489	13,553,673	15,328,256	15,909,044
Totals, Surplus	**23,182,716**	**26,544,670**	**30,710,047**	**34,452,790**	**37,794,135**
Total Liabilities, Reserves and Surplus	**91,935,884**	**98,312,385**	**106,909,146**	**116,400,635**	**125,537,858**
Percentages of net debt to total assets	54·2	50·8	47·8	46·0	44·1

In Table **13** will be found details of the earnings and expenses of the electrical distributing systems of the urban municipalities served by the Hydro-Electric Power Commission, for the five years from 1927 to 1931. The first item of expense "power purchased" is the municipalities' share of the Commission's costs for generation, purchase, and transmission of the power in bulk; all other expenses and earnings relate to local distribution within the municipalities. A very rapid growth will be noted.

13.—Statement of Earnings and Expenses of Electric Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission for the calendar years 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
Number of Municipalities Included	251	255	259	267	275
	$	$	$	$	$
Earnings—					
Domestic service	8,189,867	8,925,051	9,873,682	10,542,904	10,972,952
Commercial light service	4,626,815	5,182,723	5,697,766	5,961,383	6,230,476
Commercial power service	7,342,173	8,298,669	9,376,159	9,340,653	9,456,225
Municipal power	1,913,503	1,921,301	2,086,444	2,111,482	1,967,119
Street lighting	1,489,242	1,534,477	1,598,262	1,674,528	1,746,855
Sale of merchandise	13,766[1]	48,452	51,591	28,955	29,446
Miscellaneous	581,913	465,792	522,781	581,915	511,140
Totals, Earnings	**24,157,279**	**26,376,465**	**29,206,685**	**30,241,820**	**30,914,213**
Expenses—					
Power purchased	13,505,584	14,688,570	16,379,163	17,323,078	18,085,167
Substation operation	430,212	420,512	461,270	479,503	487,484
Substation maintenance	275,149	247,648	274,276	320,717	303,536
Distribution system, operation and maintenance	758,747	736,160	907,817	991,973	1,015,256
Line transformer maintenance	94,706	88,676	93,608	96,746	93,463
Meter maintenance	214,814	218,531	242,126	278,379	284,634
Consumers' premises expenses	285,353	291,333	314,495	317,902	363,078
Street lighting, operation and maintenance	318,396	329,597	359,373	372,211	368,120
Promotion of business	220,687	249,842	250,844	249,070	255,956
Billing and collecting	605,627	638,797	695,729	745,159	792,984
General office, salaries and expenses	824,869	844,578	904,026	907,227	923,677
Undistributed expense	531,004	542,755	502,206	523,863	520,893
Truck operation and maintenance	–	–	110,631	112,030	107,919
Interest	2,063,698	2,111,050	2,152,695	2,220,214	2,328,094
Sinking fund and principal payments or debentures	1,505,626	1,601,711	1,687,202	1,828,062	2,061,719
Totals, Expenses	**21,634,472**	**23,009,761**	**25,335,462**	**26,766,134**	**27,991,980**
Surpluses	2,522,807	3,366,704	3,871,223	3,475,686	2,922,233
Depreciation charges	1,249,712	1,350,252	1,469,847	1,574,992	1,755,719
Surpluses less depreciation charges	1,273,095	2,016,452	2,401,376	1,900,694	1,166,514

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[1] Relates to rural service which is now given in "rural power districts".

Rural Electrical Service in Ontario.—During the past few years substantial progress has been made in Ontario in the field of rural electrification and the Commission's rural operations are now an important feature of its work. Towards this rural work the Ontario Government, pursuant to its policy of promoting the basic industry of agriculture, contributes, in the form of "grants-in-aid", 50 p.c. of the initial capital cost of distribution lines and equipment. In 1930 the Ontario legislature passed two additional Acts relating to rural service. The Rural Power District Loans Act, 1930, provides for advances up to $1,000 to actual owners of lands and premises in rural power districts, for the installation of electrical wiring and the purchase of equipment. The Rural Power District Service Charge Act, 1930, provides for the fixing of low maximum service charges for all classes of rural service. In Table **14** will be found statistics relating to rural electrical distribution systems operated by the Hydro-Electric Power Commission. A rapid rate of increase is obvious from these statistics.

14.—Statistics Relating to Electrical Service in Rural Power Districts Operated by the Hydro-Electric Power Commission of Ontario, years ended Oct. 31, 1927-31.

NOTE.—*Re* Rural Power District Legislation, consult the following Provincial Government publications: *The Power Commission Act* (R.S.O., 1927, c. 57); *The Rural Hydro-Electric Distribution Act* (R.S.O., 1927, c. 59); *The Rural Power District Loans Act, 1930* (20 Geo. V, c. 14), and *The Rural District Service Charge Act, 1930* (20 Geo. V, c. 15).

Item.		1927.	1928.	1929.	1930.	1931.
Number of rural power districts		120	131	141	160	167
Number of townships served		211	233	266	297	338
Number of consumers		25,283	31,063	37,340	46,715	55,600
Miles of primary distribution lines		2,850	3,790	4,835	6,726	8,197
Horse-power supplied		13,273	16,980	21,138	26,782	31,790
Revenue from customers	$	1,032,558	1,342,625	1,684,455	1,998,252	2,456,989
Total expenses	$	880,940	1,290,500	1,495,928	1,864,823	2,354,792
Net surplus	$	143,618	52,125	188,527	133,428	102,197
Capital invested, totals	$	5,469,179	7,298,284	9,324,514	12,665,249	15,507,583
Provincial grants-in-aid, totals	$	2,718,727	3,628,146	4,636,195	6,297,954	7,677,842

Subsection 2.—Hydro-Electric and Power Commissions in Other Provinces.

Quebec.—The Quebec Streams Commission, originally created by 1 Geo. V, c. 5, and given additional powers by 3 Geo. V, c. 6 (see R.S.Q., 1925, c. 46) and by 20 Geo. V, c. 34, is authorized to ascertain the water resources of the province, to make recommendations regarding their control, and to construct certain storage dams and operate them so as to regulate the flow of streams. The Commission has not undertaken the direct production of electric power, but has assisted companies engaged in such work by a systematic collection of data on the flow of the principal rivers and on the meteorological conditions, by investigation of numerous water-power sites and determination of the longitudinal profile of a large number of rivers, but mostly by the regulation of the flow of the principal power streams, thereby increasing very materially the amount of power available. This regulation is obtained by constructing storage dams holding water in large reservoirs during flood periods and using it to increase the flow at low-water periods.

The Commission has built storage reservoirs on the St. Maurice river, where the low-water flow has been increased from 6,000 second-feet to 18,000 second-feet, on lake Kenogami, the St. Francis, the Métis, the Ste. Anne de Beaupré and the North rivers. The entire cost to the Commission of these storage works has been about $9,000,000 and the annual revenue exceeds $750,000.

Other reservoirs which are the property of the Commission and are operated by that body have been built and paid for by the benefiting companies instead of being financed by the Commission, namely:—

In the Gatineau River watershed two large storage reservoirs, Baskatong and Cabonga, were completed in 1927 and 1929, with a combined capacity of 140 billions of cubic feet, making it possible to increase the flow of the Gatineau river from 3,000 second-feet to 10,000 second-feet. This work was paid for by the Gatineau Power Co.

On the Lièvre river, a storage reservoir of 18 billions of cubic feet was completed in 1930 at Cedars Rapids, one mile and a half above Notre-Dame-du-Laus and will be operated to maintain a regulated flow of 3,500 second-feet at High Falls. The cost of this dam was paid by the James MacLaren Co., of Buckingham.

On Mattawin river, St. Maurice District, a storage reservoir of 33 billions of cubic feet was built in 1930 at Taureau rapid, 80 miles from the mouth of the river, with a view to a better and more complete regulation of the flow of the St. Maurice river. This work was paid for by the Shawinigan Water and Power Co.

Nova Scotia.—The Nova Scotia Power Commission was created in 1919 with powers similar to those of the Ontario Commission. It is authorized to "generate, accumulate, transmit, distribute, supply and utilize electrical energy and power in any part of the province of Nova Scotia, and do everything incidental thereto or deemed by the Commission necessary or expedient therefor". Its main operations, however, are undertaken with the approval of the Lieutenant-Governor in Council.

The Commission has already constructed several important hydro-electric developments and is now operating the following systems: *St. Margaret's Bay*—sells power by wholesale in Halifax and vicinity; *Mushamush*—sells power by wholesale and retail in Lunenburg Co.; *Sheet Harbour*—sells power by wholesale in Pictou Co., supplies demands of a groundwood pulp-mill at Sheet Harbour, retails in Sheet Harbour and in Musquodoboit valley and is extending retail service to Stewiacke valley, and is extending to serve town of Truro; *Mersey System*—supplies demands of pulp and paper-mill at Brooklyn, Queens Co.; *Markland System*—supplies town of Liverpool, Caledonia valley and places in vicinity, including woodworking factory and that of a gold mine; *Tusket System*—sells power by wholesale in Yarmouth, also supplies demands of Cosmos Imperial Mills, Ltd., at Yarmouth; *Roseway System*—sells power wholesale in Shelburne; *Antigonish System*—supplies Antigonish town, and other communities in Antigonish Co.

The total installed capacity is 62,875 h.p., and there are about 235 miles of main transmission lines and 121 miles of secondary transmission and distribution lines. The total capital expenditure to Sept. 30, 1932, was $13,626,740 and the reserves were $1,297,474.

New Brunswick.—The New Brunswick Electric Power Commission operates under authority of 10 Geo. V, c. 53, and amendments thereto, and has powers somewhat similar to those of the Hydro-Electric Power Commission of Ontario, except that the plant and equipment operated by the Commission are the property of the province and not of the municipalities.

The Commission owns and operates an 11,000 h.p. hydro-electric plant at Musquash, twelve miles west of Saint John, and purchases auxiliary power from the New Brunswick Power Co. at Saint John and the Bathurst Co. Ltd. on the Nipisiguit river. It operates 100 miles of 66,000 volt line between Musquash and Moncton, 37 miles of 32,000 volt line from Nipisiguit to Newcastle, together with 500 miles of primary distribution lines.

The Commission also has a powdered fuel plant at Newcastle Creek on Grand lake. This plant has an initial installed capacity of 5,000 k.w. The plant was placed in operation Sept. 1, 1931, supplying power to Fredericton and Marysville by means of a double circuit 33,000 volt transmission line. The plant is also connected with the Musquash system by means of a 66,000 volt transmission line from Minto to Moncton. This line was placed in operation Nov. 15, 1931.

The Commission sells power *en bloc* to Saint John, Moncton, Sussex, Newcastle and Fredericton; it retails directly in several towns and villages between Saint John and Dorchester, also between Moncton and Shediac, Moncton and Albert, and along the Saint John River valley from Saint John to Gagetown, and from Fredericton north a distance of 18 miles and south a distance of 12 miles. This system serves, directly or indirectly, about 22,000 customers. The total plant investment of the Commission amounts to $6,000,000 and the total annual revenue is about $650,000.

Manitoba.—The formation of the Manitoba Power Commission was authorized by the passage of the Electrical Power Transmission Act of 1919 (c. 30, also c. 61 Consolidated Amendments, 1924) which authorizes the Commission to make provision for generating electrical energy, to enter into contracts for the purchase of power in bulk from generating agencies, and for its transmission and sale to municipalities, corporations and individuals. In 1929 legislation was passed whereby the Government undertook to pay interest charges and sinking fund charges on an amount not exceeding 50 p.c. of the capital cost of the construction and erection of equipment required for the generation and transmission of electrical power or energy to municipalities, farms and other customers.

The Commission has built and is now operating an extensive transmission system under authority of the above Act, supplying electrical power to many thousands of customers throughout Manitoba. This power is purchased under the Seven Sisters power contract from the Northwestern Power Co. and transmitted over high tension steel-tower lines to Portage la Prairie, Brandon and Morden. From this main system power is transmitted to the territory south of the Winnipeg-Brandon main line as far as the International Boundary.

A branch system serving the territory along the western boundary of the province, including the towns and villages of Reston, Pipestone, Melita, Napinka, Elkhorn, Miniota, Crandall and Arrow River, has been constructed and is operated by the Commission. This system which, until August 1931, was supplied with power generated by the Commission's plant at Virden, is now tied into the main system and supplied with power generated at Seven Sisters.

Under the authority granted by the Electrical Power Transmission Act of 1919, the Commission has made purchases of municipally-owned plants—notably at Birtle and Brandon—or entered into contracts for the supply of power by municipally-owned plants—as at Dauphin—or by the Winnipeg Electric Co., whereby power is supplied to outlying districts. This phase of the Commission's activities has shown steady growth and in 1931 several extensions were made.

The Commission owns and operates the central steam-heating system at Brandon, supplying heat to the business and part of the residential section of the city. The Commission also owns and operates the gas plant supplying gas to commercial and residential customers. It is the intention of the Commission to supply all outlying power areas from the main system just as soon as their loads are sufficient to justify the cost of building extensions.

Saskatchewan.—The Saskatchewan Power Commission was established in 1929 under the Power Commission Act (R.S.S., 1930, c. 30), authorizing the Commission to manufacture, sell and supply electrical energy, to acquire and develop water-power sites, to acquire or construct steam and oil plants, to construct transmission lines, to purchase power and to enter into contracts with municipalities for the supply of energy. The Commission is also given certain control and regulatory powers *re* the operation of electric public utilities, and is charged with the responsibility for the administration of The Electrical Licensing Act (R.S.S., 1930, c. 214).

The initial operations of the Commission were concerned with acquiring by purchase municipally-owned plants which were improved, enlarged or supplemented by installations made by the Commission and were operated as individual systems of supply. Examples of such acquisitions made in 1929 were the Saskatoon, Humboldt, and Rosthern plants, while the plant at Shellbrook, the Wynyard-Elfros-Wadena and the Leader-Prelate-Sceptre systems, served from plants at Wynyard and Leader, were established by the Commission in the same year. In 1930 the municipal plants at North Battleford, Swift Current, Unity, Maple Creek and Lanigan were acquired, and in 1931 the generating plant at Willow Bunch was added. The Watrous-Nokomis system, including ten towns and villages, was also purchased from Canadian Utilities Ltd., and has been connected with the Bulyea system of the Montreal Engineering Co., Ltd.

Transmission lines run from Saskatoon, as the centre of the main system, easterly to Humboldt, northerly to Shellbrook and Duck Lake, westerly to Radisson, and southwesterly to Rosetown. Additional lines link Rosetown with Moose Jaw and Tisdale, where the Commission has a generating plant, with Nipawin. The systems built in 1929 have been extended. All transmission lines supply towns and villages along their courses. There are now 1,322 miles of transmission lines owned and operated.

The Commission purchases several blocks of power or contracts for the interchange of power from private interests in addition to supplying energy generated at its own plants. The number of consumers served directly in 117 towns and villages is approximately 7,850 and those indirectly served (where the cities operate the distribution systems) number 16,124. The total plant investment as at Dec. 31, 1931, was approximately $7,260,000.

British Columbia.—British Columbia as a province has not, up to the present time, established any commissions for the development and use of water power for the distribution of electrical energy. Such power developments as have been undertaken to date have been by private interests or by municipalities. The Water Board, a quasi-judicial body, regulates the rates which are charged by public utility companies.

CHAPTER XIV.—MANUFACTURES.[1]

Manufacture is defined as the operation of making wares from raw materials by the hands, by tools or by machinery, thus adding, in the phraseology of the economist, new utilities, and therefore additional value, to the already existing utilities and values of the raw material. Manufacture, in primitive societies and in the pioneer stages of new communities, is normally carried on within the household for the needs of the household, as was the case among the early settlers of Canada in the seventeenth and eighteenth centuries, when domestic manufactures were carried on in combination with the cultivation of the soil, mainly at the times of the year when agricultural operations were suspended. At a later period in the evolution of society small manufactures were carried on in specialized workshops for the needs of the immediate locality or neighbourhood, as was generally the case in Eastern Canada in the first half of the nineteenth century. Later still, as a consequence of the introduction of machinery operated by steam or electric power—the so-called "industrial revolution"—and of the cheapening of transportation, manufacture has to an ever-increasing extent been concentrated in factories, often employing hundreds and even thousands of persons and producing for a national or even an international market. So far as Canada is concerned, this "industrial revolution" may be said to have commenced shortly before Confederation and to be still in progress. The growth of manufacturing production since 1870 is outlined in this article and the accompanying Table **1**, while the increasing importance of Canadian manufacturing for the international market may be illustrated by the fact that Canadian exports of manufactured produce increased from less than $3,000,000 per annum on the average of 1871-1875 to $614,000,000 in the post-war fiscal year ended Mar. 31, 1920. Exports of "fully or chiefly manufactured" products in the fiscal year ended Mar. 31, 1931, amounted in value to $352,108,830 and exports of "partly manufactured" products to $142,452,920.

Section 1.—The Evolution of Canadian Manufacturing Industries.

Early Manufactures.—The type of manufactures established in a community will in the beginning be largely determined, more especially where transportation charges are high, by the raw materials available in that community. For example, probably the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada was the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first corresponding manufacturing process was the grinding of the grain in the autumn of that year. Other early manufactures were also necessarily connected with the satisfaction of the primary needs of human beings for food, clothing and shelter, and with the other primary need for protection. At a census of occupations taken in 1681, we find enumerated a comparatively large number of tailors and shoemakers, masons and carpenters, gunsmiths and edge-tool makers.

The earlier manufactures were necessarily of a rather crude and primitive type, concerned with the production of commodities which were too bulky to bear the heavy transportation charges of those days, when only one round trip per year could be made between France and Quebec, and vessels were constantly subject to the storms of the North Atlantic and very frequently to the attacks of the English. Indeed, although the colonial policy of France under the old *régime* aimed at preventing the manufacture in Canada of any article which could be imported from the Mother Country, the uncertainties of transportation due to the colonial wars of the period—France and England were at war for 34 years out of the 74 years between 1689 and 1763—led to a necessary relaxation of restrictions. On the occasion of the English capture of a convoy in 1705, the colonists were driven to manufacture rough cloth out of whatever fibres they could obtain, such as the Canadian nettle and the inner bark of the basswood. Such events led to the introduction of sheep raising and the manufacturing of homespun woollens. The number of sheep in the colony increased from 1,820 in 1706, to 12,175 in 1720, 28,022 in 1765, 84,696 in 1784 and 829,122 in Lower Canada alone in 1827. This increase in sheep approximately measures the growth of the manufacture of homespun woollens. In the same year, according to census records, there were in Lower Canada 13,243 spinning-wheels, while 1,153,673 French ells of home-made cloth, 808,240 French ells of home-made flannel and 1,058,696 French ells of home-made linen were produced. In 1842 Upper Canada produced 433,527 yards of home-made cloth, 166,881 yards of home-made linen and 727,286 yards of home-made flannel and, in 1848, 624,971 yards of fulled cloth, 71,715 yards of linen and 1,298,172 yards of flannel. Nova Scotia in 1851 produced 119,698 yards fulled cloth, 790,104 yards non-fulled cloth and 219,352 yards flannel. Such production of homespun goods did not materially interfere with the market for the more elaborate factory-made goods imported from the United Kingdom, but supplied the daughters of pioneer families with useful work in their own homes.

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[1] Revised by A. Cohen, B. Com., Acting Chief, Industrial Statistics Branch, Dominion Bureau of Statistics. This Branch publishes individual reports on the manufacturing industries, comprising vegetable products, textiles and miscellaneous industries, also reports on the manufacturing industries generally for Canada and the provinces. For a complete list of publications of this Branch see Chapter XXIX, Section 1, under "Production".

In the days when ships were built of wood Canada was advantageously situated with respect to their production. Pont-Gravé built two small vessels at Port Royal in 1606 and one at Tadoussac in 1608. Talon, in 1666, built on his private account a ship of 120 tons, and in 1672 a vessel of over 400 tons was on the stocks at Quebec. Ships were built for the French navy and for the West India trade. Under the British *régime* shipbuilding was conducted on a large scale in Quebec and New Brunswick, the industry reaching its climax of prosperity about 1865, when 105 Quebec-built ships with a tonnage of 59,333 were placed on the register. Thereafter iron and steel ships gradually supplanted the wooden vessels, but the forests of Canada have since provided the raw material for the pulp and paper and other important industries.

The manufacture of mineral products has been of comparatively recent date. Iron deposits in the St. Maurice region were worked as early as 1733 and furnaces set up there for smelting in 1737 were in fairly constant operation until 1883. The iron and steel used in manufacturing in Canada, as well as the coal which has supplied the manufacturing industries with power, has in the main been imported from the United States, chiefly because the principal manufacturing centres of this country in the St. Lawrence and Great Lakes region are fairly conveniently situated with regard to the coal and iron supplies of the United States and far away from the coal and iron supplies of the Maritime Provinces. In recent years the shortage of coal has been made up for by the increasing use of electric power, while the great bulk of the pig iron used in Canadian manufactures is now made in domestic blast furnaces.

The Introduction of the Factory System.—In Canada, as in the United States and in Great Britain, it was inevitable that manufactures, carried on in the household or in small adjoining workshops, should be supplanted in the leading industries of the country by manufactures carried on in factories. A factory has been defined as "an establishment where several workmen are collected for the purpose of obtaining greater and cheaper conveniences for labour than they could procure individually at their homes, for producing results by their combined efforts which they could not accomplish separately and for preventing the loss occasioned by carrying articles from place to place during several processes necessary to complete their manufacture". Such factories began to exist in Canada in the 60's and the 70's of the last century and have now become the dominant type of Canadian manufacturing industry.

Encouragement of Manufactures by Protective Tariffs.—In all new and developing countries producing food products and raw materials in abundance, there comes, at a certain stage, a movement for working up these commodities within the country. Thus a movement to promote a rise of manufacturing industries in Canada took place in the 50's of the last century, and in 1858 the Canadian Legislature enacted a protective tariff against which English exporters of manufactured goods vehemently protested. Canada, however, claimed the right to raise her revenue in the manner which suited herself and Great Britain did not contest the point. From that day to this there has been an element of protection in Canadian tariff legislation. For a considerable time the protection afforded to Canadian manufacturers was described as "incidental protection", and after Confederation the tariff was reduced in deference to the low tariff sentiment prevailing in the Maritime Provinces, which were commercial rather than manufacturing communities. However, after a commercial depression which took place in the 1870's the people of Canada, at the general election of 1878, voted in favour of a higher tariff.

The policy of protection was definitely adopted in 1879, when the manufacturer was given an increase in the duty on his finished product, offset in some cases, it is true, by higher duties on his raw materials. Sugar and molasses products comprised some twelve tariff items, seven bearing a compound duty, the average *ad valorem* duty imposed being 26·25 p.c. On the lines of cotton goods likely to be manufactured in Canada duties were raised from 17½ p.c. to rates, specific and *ad valorem* equivalent, on the importations of 1891, to 30 p.c. The duties on woollens, which were all in the 17½ p.c. schedule in 1878, were practically doubled. On some of the 36 iron and steel articles enumerated in the schedule the duties were specific, on some compound, but on the whole there was an average duty of 16·17 p.c. Pig iron, previously free, was made to pay $2 a ton. The duty on iron billets, bars and rods was increased from 5 p.c. to 10 p.c. and 17½ p.c., while manufactured iron and steel products and machinery were given 25 p.c. to 35 p.c. protection. On coal, both bituminous and anthracite, a duty of 50 cents a ton was imposed. The average *ad valorem* rate of duty on dutiable imports in 1880 was 26·1 p.c. as compared with 21·4 p.c. in 1878. The maximum percentage was reached in 1889, when the rate was 31·9 p.c. By 1896 there was a slight drop in the rate to 30·0 p.c. and the declining trend continued until 1918 and 1919, when a rate of 21·5 p.c. was recorded. In 1923 the rate was 24·9 p.c., in 1927, 24·1 p.c., and in 1930, 24·3 p.c. The average *ad valorem* rate of duty on all imports was 16·7 p.c. in 1923 and 15·9 p.c. in 1930. These rates are based on the gross sums collected; if the refunds and drawbacks were allowed for, the net rate of customs duty would be substantially lower.

Growth of Canadian Manufactures Prior to the War.—Until the later '90's, the growth of Canadian manufacturing industries was not particularly rapid, though the great fall in the prices of commodities during the period from 1873 to

1897 was largely responsible for the comparatively slow growth of the values of manufactured commodities from $221,600,000 in 1870 to $469,800,000 in 1890. Afterwards there was a change and the prices of commodities commenced to rise, while the industries generally shared in the advantages of the great growing period from 1900 to 1912. The gross product of establishments with five hands or over increased from $368,700,000 in 1890 to $1,166,000,000 in 1910 and to $1,381,500,000 in 1915. The fundamental advantages of the position of Canada, her abundant raw material, her inexhaustible water power, her growing home market in the expanding West, had contributed to this result.

In the present, as in the past, Canadian manufacturing production has been chiefly dependent upon the use of Canadian raw material, though this is less true than formerly. Raw cotton, for example, is imported from the Southern States, hides from Argentina, rubber from the Straits Settlements and Malay peninsula, sugar from Fiji and the British West Indies, and wool from England, Australia and New Zealand to supply the raw material for Canadian manufacturing industries.

The Influence of the War.—The influence of the War upon the manufactures of Canada was profound and far-reaching, tending to promote the diversification of products and the production at home of many commodities which had previously been imported. On account of the practical suspension of the importation of manufactured goods of many kinds from Europe, enterprising Canadian manufacturers were given opportunities of entering upon new lines of manufacture with practical control of the market. There was added to this the reflex effect of the great prosperity of agriculture, produced by the unprecedented prices of war time, with the general result that industry worked at high pressure, not only to produce munitions and military supplies for the armies of the Allies, but also to make the manifold varieties of goods required for the stimulated civilian consumption. The world shortage of staple commodities, coupled with a strong domestic demand, gave Canadian industries in general a pronounced stimulus toward greater production and, in a great number of cases, the capacity of manufacturing plants was increased; this increase created a demand for greater supplies of raw material. Incidentally, factory methods became more specialized and a high degree of administrative and mechanical efficiency was attained, and Canada, partly owing to the absorption of the energies of Europe in the War, assumed a new position as one of the leading manufacturing countries of the world. The inflation of the war period also led to unprecedented figures of values produced.

The great boom in Canadian manufactures described above reached its height in the summer of 1920, statistics for that year showing a gross value of products which was not exceeded until 1929. Even the net value of manufactured products in 1920 was not exceeded until 1928. Statistics for 1921, as published in Table **1**, show a great decline in values from those of 1920, which does not mean a corresponding decline in quantity of production, though a certain decline undoubtedly took place. There was also some decline in 1922 followed, however, by a general improvement during 1923. Final statistics for 1924 were a little below those of 1923. The statistics for 1925, 1926, 1927, 1928 and 1929 show a steady and notable growth in both gross and net values of products. These values in 1929 reached a higher point than in the post-war boom of 1920, although the prices of manufactured goods had dropped about 41 p.c. in the intervening period. This steady expansion was halted during 1930, owing to the world-wide recession in business which set in toward the end of 1929, with the result that Canadian manufacturing production in

1930 dropped back to near the 1927 level in gross value of production. The 1931 figures show a smaller gross production than in any year since the inclusion of the non-ferrous smelting industry in 1925.

Subsection 1.—Growth of Manufacturing Production in the Dominion and the Provinces Since 1870.

The growth of large-scale production in manufactures during the past half-century is evident from the statistics of Table **1**, though this tendency has been less marked in Canada than in more highly developed industrial communities, with larger populations able to absorb a larger amount of standardized commodities. Even so, in the electoral district of South Toronto, the most important manufacturing centre of Ontario, the census of 1911 showed that one-half of the industrial establishments employed 90 p.c. of the workers. In the period immediately preceding the Great War many consolidations of independent manufacturing plants were effected, with large economies in the purchase of materials and in selling expenses, and this process has been even more evident in the post-war period.

The historical Table **1** shows fairly well the advance of the "Industrial Revolution" (which might better be called "evolution") in Canada. The average capital per manufacturing establishment, the average number of employees per establishment and the average value of product per establishment, if allowance be made for the inflation of values and generally disturbed conditions of the war period, have continued to increase. If the consolidation of industry lessens the chances of an employee becoming an employer, it must be remembered that the amounts paid to employees in salaries and wages have also increased, so that the position of the average employee has been greatly ameliorated, though the lack of statistics of Canadian retail prices before 1890 prevents any detailed comparison of the purchasing power of the average wages of the worker of 1870 and of the employee of the present time.

The Censuses of Manufactures.—The comparability of the statistics of various censuses is seriously affected by the different methods employed in census-taking. In the censuses of 1870, 1880 and 1890, all manufacturing establishments were included, the instructions to enumerators running as follows: "An industrial establishment is a place where one or several persons are employed in manufacturing, altering, making up or changing from one shape into another materials for sale, use or consumption, quite irrespectively of the amount of capital employed or of the products turned out. All repairs, mending or custom work are understood to be industrial products and are to be entered accordingly, by value, in the returns of industrial establishments".

In the statistics of 1900, 1905 and 1910, however, only establishments employing five hands and upwards were included. The 1901 instructions were that no manufacturing establishment or factory was to be recognized for census purposes if it did not employ at least five persons, either in the establishment itself or as piece-workers employed outside of it. This, however, did not apply to cheese and butter factories nor to certain mineral industries. The 1911 instructions stated that every factory in operation during the whole or part of 1910, and employing five or more persons, was to make a full report. All flour mills, saw and shingle-mills, lime kilns, brick and tile works, butter and cheese factories, fish-curing plants, electric light and power plants whatsoever were nevertheless to be included. The statistics for 1915 included only establishments having an output of $2,500 or over, irrespective of the number of persons employed, except in the case of flour and grist mills, butter and cheese factories, fish-preserving factories, sawmills, brick and tile yards, lime kilns and electric light plants, where all plants were included.

Censuses of Manufactures in Recent Years.—Under the Statistics Act of 1918, the policy of including mines, fisheries, manufactures and other industries in the decennial census was given up and an annual "Census of Industry" substituted therefor. (See Annual Report of the Dominion Statistician, 1919, pp. 30-36.)

In the Census of Industry for 1917 the limit of output was withdrawn and all establishments reporting to the Bureau were included, the effect being an increase in the number of establishments included from 21,306 in 1915 to 34,392[1] in 1917—an increase due mainly to change of method, rather than to a change in the actual number of industrial establishments existing in the Dominion. The statistics in regard to a large number of the custom and repair industries were not collected for 1922, resulting in the dropping from the compilation of the entire group of "construction, hand trades and repairs". For 1923, again, statistics of ship- and bridge-building and of various clay products industries were collected and included for the first time. The result was that, in order to restore the desired comparability between statistics of various years, a complete revision of all figures from 1917 to 1924 had to be made. Considerable changes have resulted, but statistics of these years are now free of all inaccuracies due to changes in methods of collection or compilation. In 1925 statistics of the non-ferrous metal smelting industry were, for the first time, included in the figures for manufacturing. Certain duplications in the revenues of central electric stations have not been uniformly treated, but net revenues only are now shown for 1926 and later years. The method of compiling the number of employees was changed for 1925 and subsequent years in the following respect: the yearly average of employees for each establishment was computed by dividing the sum of employees reported in each month by the number of months in operation instead of, as formerly, by 12 whether the industry was seasonal and only operated part of the year or not. These changes have created a slight incomparability with the statistics for the preceding years.

In any comparison between the results of the 1915 quinquennial census and the subsequent annual censuses, the rapid rise and fall in prices must be borne in mind, and in comparisons between these annual censuses themselves the same factor must be taken into account. Thus, the new Canadian weighted index number of wholesale prices, compiled by the Dominion Bureau of Statistics with 1926 as a base, was 155·9 in 1920 as compared with 134·0 in 1919, 127·4 in 1918, 114·3 in 1917 and 70·4 in 1915. In 1921, however, there was a great decline to 110·0—a decline of approximately 29·4 p.c. from the preceding year. In such circumstances, it was inevitable that up to 1920 phenomenal advances in the money value of manufactured products should have been recorded, and that wages and salaries paid should also have greatly advanced since 1915. It was equally inevitable that in all these respects 1921 should show a great decline, due in much larger measure to the fall in values than to the decrease in the volume of production. In 1922 the index number showed a further drop to 97·3, but afterwards there was a rise to 98·0 in

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[1] The subsequent decision to omit the group of "construction, hand trades and repairs" from the Census of Manufactures, together with other less important changes, accounts for the reduction of the number of manufacturing establishments in 1917, as appearing in Table **1**, to 22,838, a comparable figure with the 23,597 establishments recorded in 1929, the 24,020 in 1930 and the 24,501 in 1931.

1923, to 99·4 in 1924 and 102·6 in 1925. In 1926, 1927, 1928, 1929 and 1930, however, there was a declining trend again to 100·0, 97·7, 96·4, 95·6 and 86·6, respectively, this last being the lowest figure since 1916. This would indicate that the comparatively small decline in the gross production of manufactured goods in 1922 was entirely due to declining values. Gross production in 1926, 1927, 1928 and 1929 showed large increases in spite of a definite decline in price levels, while the sharp decline in prices during 1930 was also accompanied by some diminution in the volume of manufacturing as well. (See Table **5.**)

In Table **1** summary statistics for the Dominion only are presented for the years 1870 to 1931, while Tables **2** and **3** give statistics by provinces and industrial groups for the years 1920, 1922 and 1925 to 1931 inclusive.

1.—Historical Summary of Statistics of Manufactures for the Dominion, 1870-1931.

Year.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.[1]	Net Value of Products.	Gross Value of Products.[1]
	No.	$	No.	$	$	$	$
(All establishments irrespective of the number of employees.)							
1870	41,259	77,964,020	187,942	40,851,009	124,907,846	96,709,927	221,617,773
1880	49,722	165,302,623	254,935	59,429,002	179,918,593	129,757,475	309,676,068
1890	75,964	353,213,000	369,595	100,415,350	250,759,292	219,088,594	469,847,886
(Establishments with five hands and over.)							
1890	14,065	–	272,033	79,234,311	–	–	368,696,723
1900	14,650	446,916,487	339,173	113,249,350	266,527,858	214,525,517	481,053,375
1910	19,218	1,247,583,609	515,203	241,008,416	601,509,018	564,466,621	1,165,975,639
1915	15,593	1,958,705,230	–	283,311,505	791,943,433	589,603,792	1,381,547,225
(All establishments irrespective of the number of employees.)							
1917	22,838	2,696,154,030	621,694	509,382,027	1,541,087,416	1,332,180,767	2,873,268,183
1918	22,910	2,926,815,424	618,305	582,457,488	1,829,040,369	1,460,723,777	3,289,764,146
1919	23,249	3,095,025,799	611,008	618,463,139	1,780,629,840	1,509,870,745	3,290,500,585
1920	23,351	3,371,940,653	609,586	732,120,585	2,085,271,649	1,686,978,408	3,772,250,057
1921	22,235	3,190,026,358	456,076	518,785,137	1,366,893,685	1,209,143,344	2,576,037,029
1922	22,541	3,244,302,410	474,430	510,431,312	1,283,774,723	1,198,434,407	2,482,209,130
1923	22,642	3,380,322,950	525,267	571,470,028	1,470,140,139	1,311,025,375	2,781,165,514
1924	22,178	3,538,813,460	508,503	559,884,045	1,438,409,681	1,256,643,901	2,695,053,582
1925	22,331	3,808,309,981	544,225	596,015,171	1,587,665,408	1,360,879,907	2,948,545,315
1926	22,708	3,981,569,590	581,539	653,850,933	1,728,624,192	1,492,645,039	3,221,269,231
1927	22,936	4,337,631,558	618,933	693,932,228	1,758,789,334	1,635,923,936	3,394,713,270
1928	23,379	4,780,296,049	658,023	755,199,372	1,919,438,703	1,819,046,025	3,738,484,728
1929	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	1,997,350,365	4,029,371,340
1930	24,020	5,203,316,760	644.439	736.092,766	1,666,983,902	1,761,986,726	3,428,970,628
1931	24,501	4,961,312,408	557,426	624,545,561	1,223,880,011	1,474,581,851	2,698,461,862

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[1] Certain duplications in the gross revenue of central electric stations were eliminated in a net figure and the difference shown as a "cost of material" for the years 1926-29, but net revenues only are now included for both gross and net values for those years. Therefore the figures here given differ slightly from those formerly published.

2.—Summary of Statistics of Manufactures, by Provinces, 1920, 1922 and 1925-1931.

NOTE.—See note to Table 3 p. 408. Statistics for certain years from 1917 to 1924 omitted here are given on pp. 407-9 of the 1931 Year Book.

Province.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1920.							
Canada	**23,351**	**3,371,940,653**	**609,586**	**732,120,585**	**2,085,271,649**	**1,686,978,408**	**3,772,250,057**
P. E. Island	384	2,734,719	1,327	888,121	4,164,223	2,221,746	6,385,969
Nova Scotia	1,388	141,549,856	23,834	26,127,781	85,724,785	63,274,708	148,999,493
New Brunswick	928	105,671,688	19,241	19,505,048	60,812,641	46,910,631	107,723,272
Quebec	7,677	1,028,226,105	186,308	205,829,155	553,558,520	517,693,125	1,071,251,645
Ontario	9,473	1,668,079,488	300,794	369,846,193	1,071,843,374	822,570,783	1,894,414,157
Manitoba	773	112,896,616	24,381	33,357,872	92,729,271	65,492,637	158,221,908
Saskatchewan	639	31,727,162	7,182	10,249,392	34,894,105	24,655,529	59,549,634
Alberta	722	61,063,132	11,387	15,903,609	56,139,646	32,466,428	88,606,074
B.C. and Yukon	1,367	219,991,887	35,132	50,413,414	125,405,084	111,692,821	237,097,905
1922.							
Canada	**22,541**	**3,244,302,410**	**474,430**	**510,431,312**	**1,283,774,723**	**1,198,434,407**	**2,482,209,130**
P. E. Island	352	2,946,329	1,127	628,540	2,621,443	1,787,569	4,409,012
Nova Scotia	1,163	106,647,616	14,286	12,192,652	38,003,168	29,985,794	67,988,962
New Brunswick	897	82,230,895	14,351	12,201,014	38,059,376	26,821,281	64,880,657
Quebec	7,410	970,019,442	147,952	144,368,667	337,752,977	370,276,067	708,029,044
Ontario	9,388	1,696,738,996	243,297	275,559,006	678,746,675	617,752,828	1,296,499,503
Manitoba	781	88,779,517	14,188	18,274,012	54,630,668	41,326,416	95,957,084
Saskatchewan	614	31,101,612	4,196	5,618,174	22,450,051	16,357,481	38,807,532
Alberta	672	55,514,624	7,461	9,493,543	30,306,395	22,813,091	53,119,486
B.C. and Yukon	1,264	210,323,379	27,572	32,095,704	81,203,970	71,313,880	152,517,850
1925.							
Canada	**22,331**	**3,808,309,981**	**544,225**	**596,015,171**	**1,587,665,408**	**1,360,879,907**	**2,948,545,315**
P. E. Island	318	2,576,677	2,317	572,130	2,805,665	1,484,484	4,290,149
Nova Scotia	1,184	117,326,491	16,568	12,082,693	37,854,196	27,179,505	65,033,701
New Brunswick	861	91,509,933	17,275	14,430,252	44,886,292	28,488,368	73,374,660
Quebec	6,995	1,136,033,133	168,245	169,686,055	412,460,003	408,103,754	820,563,757
Ontario	9,386	1,925,593,482	262,483	307,304,007	828,939,668	698,214,992	1,527,154,660
Manitoba	769	120,362,238	20,023	25,286,173	71,683,113	52,462,650	124,145,763
Saskatchewan	650	31,607,896	4,402	5,755,629	24,353,581	15,739,692	40,093,273
Alberta	734	69,805,848	9,364	11,785,604	45,855,910	29,257,607	75,113,517
B.C. and Yukon	1,434	313,494,283	43,548	49,112,628	118,826,980	99,948,855	218,775,835
1926.							
Canada	**22,708**	**3,981,569,590**	**581,539**	**653,850,933**	**1,728,624,192**	**1,492,645,039**	**3,221,269,231**
P. E. Island	299	2,850,010	2,261	690,403	2,637,960	1,431,091	4,069,051
Nova Scotia	1,163	118,050,902	16,782	13,014,707	39,137,265	33,819,503	72,956,768
New Brunswick	910	95,661,154	17,674	14,609,734	44,074,961	29,586,833	73,661,794
Quebec	7,164	1,216,975,958	180,669	189,326,145	442,927,613	456,716,511	899,644,124
Ontario	9,457	1,985,165,921	280,353	335,164,239	908,044,673	753,334,653	1,661,379,326
Manitoba	797	127,445,924	21,201	26,973,850	75,000,529	57,129,459	132,129,988
Saskatchewan	674	33,943,060	4,904	6,397,545	29,128,035	17,965,397	47,093,432
Alberta	749	72,468,286	10,233	12,808,554	49,826,532	33,232,962	83,059,494
B.C. and Yukon	1,495	329,008,375	47,462	54,865,756	137,846,624	109,428,630	247,275,254
1927.							
Canada	**22,936**	**4,337,631,558**	**618,933**	**693,932,228**	**1,758,789,334**	**1,635,923,936**	**3,394,713,270**
P. E. Island	291	3,081,504	2,232	687,849	2,854,943	1,638,190	4,493,133
Nova Scotia	1,190	128,155,040	17,864	13,610,944	41,498,489	32,398,977	73,897,466
New Brunswick	872	99,087,327	18,970	14,999,101	42,353,973	29,886,083	72,240,056
Quebec	7,206	1,376,654,019	196,094	203,724,997	466,344,948	516,221,599	982,566,547
Ontario	9,512	2,134,181,377	296,034	355,174,773	920,849,136	818,132,010	1,738,981,146
Manitoba	859	151,373,047	23,031	28,934,926	78,862,212	62,578,912	141,441,124
Saskatchewan	721	38,387,248	5,683	7,280,945	32,147,303	20,015,654	52,162,957
Alberta	776	81,664,730	11,285	13,511,359	50,209,720	34,376,296	84,586,016
B.C. and Yukon	1,509	325,047,266	47,740	56,007,334	123,668,61	0120,676,215	244,344,825
1928.							
Canada	**23,379**	**4,780,296,049**	**658,023**	**755,199,372**	**1,919,438,703**	**1,819,046,025**	**3,738,484,728**
P. E. Island	277	3,121,568	2,035	712,945	2,746,811	1,697,868	4,444,679
Nova Scotia	1,167	138,809,331	19,222	15,838,394	43,515,481	40,780,167	84,295,648
New Brunswick	794	114,660,886	17,963	14,682,510	39,261,547	27,663,181	66,924,728
Quebec	7,231	1,583,350,884	204,959	217,887,481	503,721,164	562,581,419	1,066,302,583
Ontario	9,900	2,275,921,056	320,729	391,375,947	1,014,934,682	915,222,879	1,930,157,561
Manitoba	871	159,721,124	25,166	32,569,223	87,347,743	71,150,401	158,498,144
Saskatchewan	737	44,622,135	6,173	8,003,577	34,166,490	24,938,549	59,105,039
Alberta	778	92,190,476	12,827	15,403,292	58,782,951	41,345,704	100,128,655
B.C. and Yukon	1,624	367,898,589	48,949	58,726,003	134,961,834	133,665,857	268,627,691

2.—Summary of Statistics of Manufactures, by Provinces, 1920, 1922 and 1925-1931—concluded.

Province.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1929.							
Canada	**23,597**	**5,083,014,754**	**694,434**	**813,049,842**	**2,032,020,975**	**1,997,350,365**	**4,029,371,340**
P. E. Island	276	3,489,934	2,133	781,448	2,864,383	1,773,894	4,638,277
Nova Scotia	1,195	135,662,325	20,966	17,925,190	50,781,055	42,786,293	93,567,348
New Brunswick	860	117,965,970	18,517	15,712,322	39,845,223	30,980,431	70,825,654
Quebec	7,156	1,673,011,042	213,467	233,803,672	537,828,611	617,372,403	1,155,201,014
Ontario	9,910	2,418,340,450	339,859	421,789,723	1,057,407,249	1,022,984,190	2,080,391,439
Manitoba	923	173,152,948	26,318	34,158,583	88,055,264	75,750,746	163,806,010
Saskatchewan	761	58,877,124	8,047	10,438,759	51,143,205	29,292,332	80,435,537
Alberta	817	107,648.028	13.748	16,460,038	62,700.608	44.123.868	106,824,476
B.C. and Yukon	1,699	394,866,933	51,379	61,980,107	141,395,377	132,286,208	273,681,585
1930.							
Canada	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
P. E. Island	267	3,441,958	2,055	788,106	2,546,827	1,708,139	4,254,966
Nova Scotia	1,302	133,671,163	21,069	17,537,690	44,506,178	41,296,743	85,802,921
New Brunswick	924	140,611,530	18,422	14,988,441	33,897,264	29,570,998	63,468,262
Quebec	7,410	1,727,064.388	204,802	216,835,675	462,244,278	560,036,409	1,022,280,687
Ontario	9,888	2,431,369,848	307,477	370,781,452	836,666,780	876,358,542	1,713,025,322
Manitoba	937	188,413,164	26,488	33,941,235	74,761,265	67,663,725	142,424,990
Saskatchewan	750	65,486,140	7,248	9,229,593	35,608,157	26,668,609	62,276,766
Alberta	845	109.930,271	14,099	17,092,033	53,621,884	40,692,898	94,314,782
B.C. and Yukon	1,697	403.328,298	42,779	54,898,541	123,131,269	117,990,663	241,121,932
1931.							
Canada	**24,501**	**4,961,312,408**	**557,426**	**624,545,561**	**1,223,880,011**	**1,474,581,851**	**2,698,461,862**
P. E. Island	290	4,019,288	1,170	809,122	2,349,367	1,787,209	4,136,576
Nova Scotia	1,449	129,824,727	16,175	14,881,673	33,288,250	37,391,253	70,679,503
New Brunswick	872	128,859,472	13,107	12,706,897	25,631,856	29,577,962	55,209,818
Quebec	7,505	1,662,811,076	180,808	187,362,564	369,044,132	480,110,221	849,154,353
Ontario	10,140	2,285,361,451	269,739	313,676,300	597,879,792	714,521,036	1,312,400,828
Manitoba	955	191,935,311	24,193	30,706,209	55,149,392	63,391,473	118,540,865
Saskatchewan	768	68,547,866	6,061	7,546,703	22,540,618	21,724,533	44,265,151
Alberta	886	107,427,603	11,798	14,213,753	36,090,169	32,277,242	68,367,411
British Columbia and Yukon	1,636	382,525,614	34,375	42,642,340	81,906,435	93,800,922	175,707,357

3.—Summary of Statistics of Manufactures, by Industrial Groups, 1920, 1922 and 1925-1931.

NOTE.—Figures for the Chemical Group published in this table do not correspond with those published in the Annual Report on Chemicals and Allied Products for the following reason. In the report on Chemicals and Allied Products the figures for 1920 to 1928 have been revised and are directly comparable with those given for 1929 and 1930. Prior to 1929 the industry totals included the value placed on intermediate materials and products which were made and used in further processes in the producing works. In 1929 this policy was altered to exclude these intermediates and the figures have been revised on this new basis. Statistics of the non-ferrous metal smelting industries were included in manufactures for the first time in 1925. See footnote to Table 1 p. 406. Statistics for certain years from 1917 to 1924 omitted here are given on pp. 410-12 of the 1931 Year Book.

Industrial Group.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1920.							
Totals	**23,351**	**3,371,940,653**	**609,586**	**732,120,585**	**2,085,271,649**	**1,686,978,408**	**3,772,250,057**
Vegetable products	4,219	394,123,233	72,380	75,695,530	532,484,195	234,317,527	766,801,722
Animal products	4,823	221,792,457	48,687	54,291,606	400,496,354	152,995,130	553,491,484
Textile products	1,304	302,758,185	87,730	84,433,609	256,233,300	173,741,035	429,974,335
Wood and paper	7,867	772,086,812	143,731	171,610,460	308,282,232	415,784,276	724,066,508
Iron and its products	1,690	642,904,322	146,204	205,414,599	349,642,666	365,473,097	715,115,763
Non-ferrous metals	324	109,382,033	23,162	27,895,343	48,434,120	52,847,178	101,281,298
Non-metallic minerals	1,176	223,541,735	27,361	34,406,423	74,200,407	85,216,316	159,416,723
Chemicals and allied products	464	122,123,730	17,653	22,193,421	62,644,608	65,183,212	127,827,820
Miscellaneous industries	665	134,954,504	31,985	41,552,885	52,853,767	75,715,577	128,569,344
Central electric stations	819	448,273,642	10,693	14,626,709	-	65,705,060	65,705,060

3.—Summary of Statistics of Manufactures, by Industrial Groups, 1920, 1922 and 1925-1931—continued.

Industrial Group.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1922.							
Totals	**22,541**	**3,244,302,410**	**474,430**	**510,431,312**	**1,283,774,723**	**1,198,434,407**	**2,482,209,130**
Vegetable products	4,355	371,361,682	63,217	64,424,922	330,589,052	206,946,749	537,535,801
Animal products	5,118	201,829,414	49,595	49,933,679	264,078,631	107,473,382	371,552,013
Textile products	1,709	268,065,238	88,048	76,224,361	153,066,593	155,493,510	308,560,103
Wood and paper	6,983	761,188,396	118,462	132,084,914	206,682,820	283,131,962	489,814,782
Iron and its products	1,040	526,109,953	74,588	90,605,157	168,282,265	163,302,638	331,584,903
Non-ferrous metals	325	102,208,275	18,222	21,451,629	30,861,895	39,993,798	70,855,693
Non-metallic minerals	1,095	238,691,461	22,468	27,204,642	63,377,262	77,911,159	141,288,421
Chemicals and allied products	469	118,025,483	14,082	16,770,503	47,039,926	48,904,259	95,944,185
Miscellaneous industries	542	88,753,756	15,064	17,236,255	19,796,279	32,948,084	52,744,363
Central electric stations	905	568,068,752	10,684	14,495,250	-	82,328,866	82,328,866
1925.							
Totals	**22,331**	**3,808,309,981**	**544,225**	**596,015,171**	**1,587,665,408**	**1,360,879,907**	**2,948,545,315**
Vegetable products	4,558	439,490,764	72,035	72,796,657	404,684,887	227,526,377	632,211,264
Animal products	4,892	210,015,438	63,675	55,285,458	315,914,684	115,863,479	431,778,163
Textile products	1,640	305,776,409	94,531	81,573,988	193,238,560	143,950,124	337,188,684
Wood and paper	6,652	907,204,530	127,859	148,457,748	246,551,591	310,642,862	557,194,453
Iron and its products	1,075	567,912,477	90,125	117,642,470	206,337,132	205,041,508	411,378,640
Non-ferrous metals	378	181,600,227	27,735	35,713,903	74,068,260	85,701,766	159,770,026
Non-metallic minerals	1,191	239,823,825	24,468	29,892,659	65,278,752	78,969,840	144,248,592
Chemicals and allied products	510	126,483,348	13,951	17,469,157	56,299,219	56,607,527	112,906,746
Miscellaneous industries	428	103,281,876	16,583	18,427,224	25,292,323	33,988,542	59,280,865
Central electric stations	1,007	726,721,087	13,263	18,755,907	-	102,587,882	102,587,882
1926.							
Totals	**22,708**	**3,981,569,590**	**581,539**	**653,850,933**	**1,728,624,192**	**1,492,645,039**	**3,221,269,231**
Vegetable products	4,529	449,259,094	73,908	75,349,586	414,316,414	244,004,302	658,320,716
Animal products	4,896	223,938,559	67,843	60,203,986	329,114,267	122,920,658	452,034,925
Textile products	1,698	317,275,429	100,572	88,596,752	202,832,383	163,502,261	366,334,644
Wood and paper	6,751	929,589,278	134,187	160,916,729	261,001,976	339,062,685	600,064,661
Iron and its products	1,142	597,982,098	103,510	137,640,065	258,020,373	247,168,476	505,188,849
Non-ferrous metals	403	202,503,426	30,095	39,201,147	90,613,004	92,888,719	183,501,723
Non-metallic minerals	1,240	261,724,184	26,045	31,986,949	82,293,319	91,863,604	174,156,923
Chemicals and allied products	556	133,407,891	14,345	18,309,377	60,124,582	62,464,944	122,589,526
Miscellaneous industries	436	109,669,565	17,628	21,703,342	30,307,874	39,835,657	70,143,531
Central electric stations	1,057	756,220,066	13,406	19,943,000	-	88,933,733	88,933,733
1927.							
Totals	**22,936**	**4,337,631,558**	**618,933**	**693,932,228**	**1,758,789,334**	**1,635,923,936**	**3,394,713,270**
Vegetable products	4,793	494,176,054	78,300	81,830,734	429,325,105	283,374,975	712,700,080
Animal products	4,692	233,113,872	68,381	61,407,018	325,455,482	132,260,556	457,716,038
Textile products	1,802	346,512,165	107,519	95,891,243	198,870,157	183,137,300	382,007,457
Wood and paper	6,811	1,023,301,749	150,550	167,995,734	271,780,232	357,786,924	629,567,156
Iron and its products	1,148	638,914,893	106,293	143,351,174	261,102,679	264,819,160	525,921,839
Non-ferrous metals	401	208,957,166	33,443	44,154,695	87,612,666	112,757,295	200,369,961
Non-metallic minerals	1,184	280,033,057	26,662	33,958,541	86,312,529	89,433,536	175,746,065
Chemicals and allied products	561	134,618,839	14,559	18,656,851	63,630,588	63,854,084	127,484,672
Miscellaneous industries	447	111,178,478	18,518	23,739,923	34,699,896	44,466,809	79,166,705
Central electric stations	1,097	866,825,285	14,708	22,946,315	-	104,033,297	104,033,297

3.—Summary of Statistics of Manufactures, by Industrial Groups, 1920, 1922 and 1925-1931—concluded.

Industrial Group.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1928.							
Totals	**23,379**	**4,780,296,049**	**658,023**	**755,199,372**	**1,919,438,703**	**1,819,046,025**	**3,738,484,728**
Vegetable products	4,845	531,918,725	83,764	88,119,342	439,922,128	317,073,457	756,995,585
Animal products	4,542	243,550,121	67,777	61,950,631	351,324,498	133,697,496	485,021,994
Textile products	1,885	365,721,591	113,724	103,451,325	223,730,616	191,671,848	415,402,464
Wood and paper	7,290	1,158,651,534	158,005	179,244,698	293,159,913	389,389,952	682,549,865
Iron and its products	1,159	702,931,186	119,199	168,320,038	309,618,074	300,014,925	609,632,999
Non-ferrous metals	406	253,367,370	35,568	47,497,842	98,746,019	139,220,908	237,966,927
Non-metallic minerals	1,178	298,693,122	28,650	37,136,451	93,683,873	112,398,268	206,082,141
Chemicals and allied products	572	148,939,920	16,130	20,290,417	74,163,334	72,812,503	146,975,837
Miscellaneous industries	453	119,602,877	19,351	25,101,208	35,090,248	50,439,849	85,530,097
Central electric stations	1,049	956,919,603	15,855	24,087,420	-	112.326,819	112,326,819
1929.							
Totals	**23,597**	**5,083,014,754**	**694,434**	**813,049,842**	**2,032,020,975**	**1,997,350,365**	**4,029,371,340**
Vegetable products	5,005	569,064,835	88,858	93,299,665	427,019,724	344,437,941	771,457,665
Animal products	4,490	243,825,065	67,670	62,081,423	345,351,882	132,409,973	477,761,855
Textile products	1,891	383,153,797	115,620	105,896,237	220,304,250	205,943,337	426,247,587
Wood and paper	7,405	1,152,075,234	164,800	192,235,448	314,203,289	411,616,451	725,819,740
Iron and its products	1,169	754,989,105	132,281	186,928,700	384,925,660	353,087,320	738,012,980
Non-ferrous metals	408	298,721,106	39,867	54,501,806	124,900,632	158,645,034	283,545,666
Non-metallic minerals	1,188	329,448,844	31,431	41,511,846	117,149,130	124,874,388	242,023,518
Chemicals and allied products	554	165,886,912	16,694	22,639,449	55,184,337	83,360,884	138,545,221
Miscellaneous industries	463	130,118,324	21,049	29,123,447	42,982,071	60,091,591	103,073,662
Central electric stations	1,024	1,055,731,532	16,164	24,831,821	-	122,883,446	122,883,446
1930.							
Totals	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
Vegetable products	5,041	569,403,769	84,182	85,259,243	357,510,340	314,513,326	672,023,666
Animal products	4,341	233,334,972	57,657	55,564,398	285,328,411	132,212,467	417,540,878
Textile products	1,886	368,567,643	109,576	97,903,096	184,563,865	177,250,868	361,814,733
Wood and paper	7,816	1,221,357,252	156,724	174,406,889	268,249,293	368,350,618	636,599,911
Iron and its products	1,196	757,797,256	119,987	165.429,608	281,713,862	288,032,111	569,745,973
Non-ferrous metals	429	325,605,549	38,756	52,319,027	111,738,411	138,720,310	250,458,721
Non-metallic minerals	1,234	336,018,922	29,868	39,241,165	107,206,674	109,606,153	216,812,827
Chemicals and allied products	591	168,119,152	15,503	21,041,789	48,165,038	71,804,599	119,969,637
Miscellaneous industries	452	84,912,229	14,328	17,640,108	22,508,008	35,458,129	57,966,137
Central electric stations	1,034	1,138,200,016	17,858	27,287,443	-	126,038,145	126,038,145
1931.							
Totals	**24,501**	**4,961,312,408**	**557,426**	**624,545,561**	**1,223,880,011**	**1,474,581,851**	**2,698,461,862**
Vegetable products	5,283	545,387,574	77,706	79,022,515	260,604,562	274,474,901	535,079,463
Animal products	4,430	217,441,415	51,297	51,270,503	214,743,508	106,059,948	320,803,456
Textile products	1,955	352,344,073	105,473	92,504,088	153,191,375	163,967,295	317,158,670
Wood and paper	7,767	1,053,064,435	121,672	140,349,106	192,379,915	291,858,015	484,237,930
Iron and its products	1,243	676,270,362	96,927	120,759,931	170,754,686	203,970,382	374,725,068
Non-ferrous metals	455	318,395,983	34,414	46,111,373	95,342,788	116,519,624	211,862,412
Non-metallic minerals	1,272	328,873,782	24,895	32,219,282	78,945,766	102,486,140	181,431,906
Chemicals and allied products	621	163,863,072	15,207	20,867,948	40,756,550	64,745,355	105,501,905
Miscellaneous industries	464	75,682,761	12,821	15,133,859	17,160,861	28,189,461	45,350,322
Central electric stations	1,011	1,229,988,951	17,014	26,306,956	-	122,310,730	122,310,730

4.—Summary Statistics of Manufactures, 1922 and 1924-30.

Item.		1922.	1924.	1925.[1]	1926.	1927.	1928.	1929.	1930.
Establishments	No.	22,541	22,178	22,331	22,708	22,936	23,379	23,597	24,020
Capital	$	3,244,302,410	3,538,813,460	3,808,309,981	3,981,569,590	4,337,631,558	4,780,296,049	5,083,014,754	5,203,316,760
Average capital per establishment	$	143,929	159,563	170,538	175,338	189,119	204,469	215,409	216,624
Average capital per employee	$	6,838	6,959	6,999	6,486	7,008	7,264	7,318	8,074
Average capital per wage-earner	$	8,143	8,186	8,162	7,967	8,131	8,434	8,505	9,435
Total employees	No.	474,430	508,503	544,225	581,539	618,933	658,023	694,434	644,439
Average number of employees per establishment	No.	21·1	22·9	24·4	25·6	27·0	28·2	29·4	26·8
Total salaries and wages	$	510,431,312	559,884,045	596,015,171	653,850,933	693,932,228	755,199,372	813,049,842	736,092,766
Average salaries and wages per establishment	$	22,645	25,245	26,690	28*794	30,255	32,302	34,456	30,645
Average salaries and wages per employee	$	1,076	1,101	1,095	1,124	1,121	1,148	1,171	1,142
Employees on salaries	No.	76,040	76,230	77,623	81,794	85,483	91,243	96,607	92,943
Average salaried employees per establishment	No.	3·4	3·4	3·5	3·6	3·7	3·9	4·1	3·8
Salaries	$	136,219,171	139,614,639	143,056,516	152,705,944	162,348,978	174,770,879	188,747,672	184,239,117
Average salary	$	1,791	1,831	1,843	1,867	1,899	1,915	1,954	1,982
Employees on wages	No.	398,390	432,273	466,602	499,745	533,450	566,780	597,827	551,496
Average number of wage-earners per establishment	No.	17·7	19·5	20·9	22·0	23·3	24·3	25·3	23·0
Wages	$	374,212,141	420,269,406	452,958,655	501,144,989	531,583,250	580,428,493	624,302,170	551,853,649
Average wage	$	939	972	971	1,003	997	1,024	1,045	1,001
Cost of materials	$	1,283,774,723	1,438,409,681	1,587,665,408	1,728,624,192	1,758,789,334	1,919,438,703	2,032,020,975	1,666,983,902
Average cost of materials per establishment	$	56,953	64,858	71,097	76,124	76,682	82,101	86,114	69,400
Average cost of materials per employee	$	2,709	2,827	2,917	2,972	2,842	2,917	2,926	2,587
Value added in manufacture	$	1,198,434,407	1,256,643,901	1,360,879,907	1,492,645,039	1,635,923,936	1,819,046,025	1,997,350,365	1,761,986,726
Average value added per establishment	$	53,167	56,662	60,941	65,732	71,325	77,807	84,645	73,355
Average value added per employee	$	2,523	2,473	2,501	2,567	2,643	2,764	2,877	2,734
Gross value of product	$	2,482,209,130	2,695,053,582	2,948,545,315	3,221,269,231	3,394,713,270	3,738,484,728	4,029,371,340	3,428,970,628
Average gross value of product per establishment	$	110,120	121,519	132,038	141,856	148,008	159,907	170,758	142,755
Average gross value of product per employee	$	5,232	5,300	5,418	5,539	5,485	5,681	5,802	5,321
Power employed[2]	H.P.	2,016,563	2,538,535	2,888,164	3,134,248	3,287,582	3,592,184	3,867,979	4,051,744
Average number of horse-power per establishment[2]	H.P.	95	120	135	145	151	161	171	176
Average number of horse-power per wage-earner[2]	H.P.	5·14	5·97	6·29	6·37	6·27	6·45	6·58	7·49
Piece workers[3]	No.	6,095	7,674	3,735	2,431	2,939	3,021	2,288	2,278
Earnings of piece workers[3]	$	1,284,437	1,485,422	692,302	466,708	450,057	456,766	407,638	326,570

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[1] A change in the method of computing the number of employees in 1925 and later years increased the number somewhat over that which the method previously used would have given. There was therefore a proportionate reduction in the averages for 1925 and later years per employee and wage-earner, as compared to what these averages would have been under the former method.

[2] The figures of power in this table represent the installation in manufactures exclusive of central electric stations, which are also excluded from the number of establishments and of employees in working out the averages. These figures are thus not comparable with those given on pp. 384-385 in the 1926 Year Book.

[3] These are piece workers employed outside the establishments and are not included in general statistics of number of employees or of earnings.

Subsection 2.—Summary Statistics of Manufacturing Production.

Summary Statistics of Manufactures.—In Table **4** will be found an analysis of the most important statistics of manufactures for the eight years 1922 and 1924-30 here brought together in order that the tendencies in Canadian manufacturing industries may be traced as clearly as possible through this latest period of their development. Corresponding figures for the years from 1917 to 1922 were given at p. 384 of the 1926 Year Book, but the inflation of values in the war and immediate post-war periods makes the figures for these years largely incomparable. One very important figure, however, where the trend of development proceeds clearly and uninterruptedly throughout the 13 years, is concerned with the use of power. In the analysis here given the aim is to show the position of power as a factor in general manufacturing production. Therefore the power installation of central electric stations has been excluded. Unfortunately this was not done for the earlier years shown in the 1926 Year Book. When this change is made it will be found that the total horse-power employed increased from 1,664,578 in 1917 to 4,051,744 in 1930 or by 143 p.c. in 13 years. In the same period the horse-power used per establishment increased from 75 to 176 and the horse-power per wage-earner from 3·04 to 7·49, indicating the rapidly increasing contribution of power to manufacturing production. The increases from $143,929 to $216,624 in average capital per establishment between 1922 and 1930, and from 21·1 to 26·8 in average number of employees are very significant figures.

Value of Products.—The gross value of manufactured products in 1930 was reported as $3,428,970,628; the cost of materials was $1,666,983,902, leaving $1,761,986,726 as the value added by manufacture. As the finished products of one branch of manufacture are constantly used as materials in other branches in the ascending scale of modern industry, it follows that they are counted over and over again, swelling in this manner the total gross value of products. The total value of manufactured products, strictly defined, would include: (1) the value of all raw materials obtained from the extractive and primary production industries which have entered into the manufacturing output; and (2) the entire value added to these raw materials by manufacturing processes from the time they first entered any factory up to the close of the census year. This total value would be very much greater than the $1,761,986,726 shown as having been added by manufacture, but not so great as the $3,428,970,628 shown as the gross value of production. (The decline of $600,000,000 in gross value of products in 1930 was mainly accounted for by a drop of almost $365,000,000 in the cost of materials).

Volume of Manufacturing Production in Recent Years.[1]—An investigation of the greatest importance, especially in a period when values are rapidly changing (see p. 405 of this volume, also Chapter XX, Canada Year Book, 1932 dealing with prices), is that of the volume of manufacturing production as distinguished from its value. Since real income is ultimately measured in goods and services, the growth of the volume of manufactures therefore becomes a matter of great importance. The important thing to know is whether consumers are getting more goods and services, not whether they are expending more dollars and cents.

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[1] For a much more detailed and comprehensive treatment of this subject see the study "The Quantity of Manufacturing Production in Canada 1923–29" by A. Cohen, B. Com., Acting Chief of the Census of Manufactures, Dominion Bureau of Statistics.

The ever-increasing use of factory products is one of the most significant features of modern life. Its beginnings are briefly sketched on pp. 400 to 406. The process has continued until at the present time fresh fruits and vegetables are about the only articles which reach the consumer without, in some way, being first processed at a factory. Fresh milk is pasteurized and bottled in a dairy plant, fresh fish and meats are dressed principally in packing plants, and the home preserving of fruits and vegetables is being superseded by more efficient processes in the canning factory. Thus even the foods we eat, as well as the clothing we wear, our household conveniences and our instruments of production and transportation, are increasingly products of factories. The growing volume of factory production, therefore, measures approximately the total flow of the economic goods upon which the rising standards of modern life so vitally depend.

The statistics of manufactures afford a variety of measures of the growth of factory production. The number of wage-earners, capital invested, value of production and value added by manufacture all show to some extent the direction and volume of growth. The value of production and that added by manufacture, being reported in dollars, are influenced by price changes as well as the quantity of goods produced and, as already explained, become misleading under the violent price changes of the past fifteen years. The capital invested is also affected by changing money values, while the relation between capital invested and value of goods produced varies greatly as between one industry and another. Neither is the number of wage-earners employed likely to be a representative measure of changes in the volume of production. The progressively increasing use of machinery and the rise in the power installed per wage-earner (see Table **4**) tend to increase the employee's output. Thus while the reported wage-earners in 1930 had increased 27·6 p.c. over the number in 1924, the volume of production is estimated to have increased by 38 p.c. in the same period.

In the construction of an independent measure or index of the volume of manufacturing production many difficulties are encountered. There are constant changes in the commodities manufactured and in their relative proportions. New articles are introduced and rapidly come into common use, such as the radio during the past decade, giving rise to quite large new industries and frequently resulting in a decline of previously existing industries. It is difficult to construct an index which will accurately show changes in manufacturing effort resulting from these changes in production. A second difficulty arises from the fact that many establishments find it difficult to accurately report quantitatively their minor products or by-products, and a few industries find the same difficulty in reporting their major products. In such cases the raw materials used or the wage-earners employed were considered in the construction of the index. A third important difficulty results from the fact that, even where there is continuity in the kind of commodities produced and where such commodities are reported quantitatively, there are changes which are not capable of statistical measurement in the quality of the commodities produced. For instance, the motor vehicle of to-day is a very different thing from that of ten or even five years ago. The improvement has entailed increases in plant equipment and workmanship and a generally greater manufacturing effort per unit produced. It is quite obvious that a true index of the volume of production should represent changes in quality as well as quantity. Since this is not possible, and since the trend of modern manufacturing is toward a more elaborate fabrication of materials with consequent improvement in quality and workmanship, it is essential to recognize that an index of volume is likely to understate rather than overstate the growth of manufacturing processes. In spite of these difficulties it is believed that the index in Table 5 on p. 416 is reasonably reliable for the broad groups of industries and may justifiably be used in making generalizations.

The central electric stations were excluded from general manufactures in making the index, since this industry is in a class by itself in the peculiar function of its product, and is also unique in the magnitude of its capital investment and the smallness of its labour force in proportion to its net production. The index is based on the quantities of manufactured products reported and includes 71·1 p.c. of the total value of the production in 1926, exclusive of central electric stations. It is weighted according to the values added in the manufactures of 1926. A complete description of the manner in which the index is constructed will be found in the publication referred to in the footnote on p. 412.

The physical volume of manufacturing production, exclusive of central electric stations, increased 50·2 p.c. from 1923 to 1929. When it is recalled that the population of Canada is estimated to have increased only 11·3 p.c. during the same period, the growth of manufacturing production is indeed remarkable. Of this advance, the part resulting from an increase in the domestic demand due to growth of population would be about 11·3 p.c. Exports of partly and fully manufactured goods increased from $591,830,000 in the fiscal year ended Mar. 31, 1924, to $690,904,000 in the fiscal year 1930, the increase in exports representing about 3·6 p.c. of the 1923 production. The remainder of the increase in production by 1929, or a margin equal to roughly 35 p.c. of the volume of manufactures of 1923, was therefore apparently absorbed by the rise in the standard of living of the population of Canada.

The index of the volume of production dropped from 150·2 in 1929 to 136·2 in 1930, a decrease of 9·3 p.c. This decrease is very significant when compared with the decreases in the net value of production and number of wage-earners employed

Owing to declines in the values of finished products (due, in a large degree, to the drastic declines in raw materials) and to the decrease in volume of production, the net value of production dropped from $1,997,350,365 in 1929 to $1,761,986,726 in 1930, a decrease of 11·8 p.c., while the number of wage-earners dropped from 597,827 to 551,496 a decrease of 7·8 p.c. It will be noted that the percentage decrease in volume of production between 1929 and 1930, *viz.* 9·3, was 1·5 greater than the percentage decrease in the number of wage-earners in the same period. This bears out the observations made in the special study on the volume of production that records of the number of wage-earners may be regarded as more likely to understate than to overstate the changes in the volume of production. As stated previously (p. 412) the tendency is toward increasing production per wage-earner through greater efficiency and increased use of machinery and labour-saving devices. Also in times of depression, many establishments follow the practice of keeping the wage-earners on the pay-roll on a part time basis rather than laying some of them off and employing the rest on full time, while in periods of increased industrial activity the additional output required is secured through overtime work rather than an increase in the number of wage-earners. The net result is to confine fluctuations in the number of wage-earners within narrower limits than that of the physical volume of production. All things considered, however, the average number of wage-earners is materially influenced by the fluctuations in industrial activity.

As may be seen from Table **5** below, all groups in the component material classification reported declines in the volume of production. The iron and steel group led with a decrease of 30·9 points, miscellaneous industries, 20·7 points, chemicals, 16·8 points, non-metallic mineral products, 13·6 points, wood and paper products, 11·4 points, non-ferrous metal products, 10·6 points, textiles and textile products, 9·4 points, vegetable products, 8·7 points and animal products with 3·6 points, the smallest decrease.

In analysing the changes in the volume of production, on a purpose classification basis, some interesting facts are revealed. The food group reported an increase of 2·1 points in the volume of production, while the output of vehicles and vessels which is very largely made up of the automobile and rubber-tire industries recorded the greatest decrease of 35·2 points. This was followed by the personal utilities group with a drop of 20·5 points. The decrease here, however, is somewhat misleading. The production of the musical instruments industry which is included in the group, has been decreasing steadily during the past few years, the output of pianos, phonographs and phonograph records becoming smaller and smaller. The main article of the musical instrument function, namely, the radio, is now produced in the electrical apparatus industry. This industry, however, is credited to the industrial equipment group, as by far the largest part of its output consists of industrial equipment. Producers' materials and industrial equipment declined 16·9 and 19·0 points respectively, due to general decreases in industrial activity. House furnishings dropped 15·0 points, drink and tobacco 12·7 points, and clothing 10·6 points.

5.—Indexes of the Volume of Manufacturing Production, According to Component Material and Purpose Classifications, 1923-30.

Group.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
COMPONENT MATERIAL CLASSIFICATION—								
Vegetable products	100·0	109·2	120·8	127·7	137·5	151·1	155·3	146·6
Animal products	100·0	107·1	113·0	122·9	120·0	123·8	117·2	113·6
Textiles and textile products	100·0	96·6	103·4	117·8	126·5	135·3	133·8	124·4
Wood and paper products	100·0	98·1	106·0	119·9	129·1	142·0	152·9	141·5
Iron and its products	100·0	80·5	95·1	121·7	125·2	138·1	157·8	126·9
Non-ferrous metals	100·0	108·5	122·8	137·2	158·3	176·1	190·3	179·7
Non-metallic minerals	100·0	95·8	98·3	112·5	122·5	138·9	163·1	149·5
Chemicals and allied products	100·0	102·3	109·5	119·0	127·0	139·6	143·3	126·5
Miscellaneous industries	100·0	108·0	106·0	124·8	138·0	136·5	137·3	116·6
Totals, All Industries[1]	**100·0**	**98·2**	**107·5**	**122·2**	**130·2**	**141·9**	**150·2**	**136·2**
PURPOSE CLASSIFICATION—								
Food	100·0	107·3	114·0	118·1	115·5	122·4	121·4	123·5
Clothing	100·0	100·1	107·5	120·6	128·6	138·7	138·5	127·9
Drink and tobacco	100·0	114·6	121·8	131·6	151·3	171·6	184·9	172·2
Personal utilities	100·0	95·4	102·2	117·1	124·5	125·2	119·3	98·8
House furnishings	100·0	111·8	109·1	126·7	153·1	158·4	174·5	159·2
Books and stationery	100·0	83·4	97·6	107·4	119·3	132·0	141·2	140·3
Vehicles and vessels	100·0	87·1	107·7	140·1	148·9	158·5	184·3	149·4
Producers' materials	100·0	94·9	103·8	117·8	125·0	138·0	146·9	130·0
Industrial equipment	100·0	99·7	108·3	131·1	142·6	157·9	169·7	150·7
Miscellaneous	100·0	104·8	108·4	117·6	124·1	133·4	147·1	123·4

[1] Exclusive of central electric stations.

The construction of this new index of the volume of manufacturing production has superseded for the years 1923-29 the index shown in Table **4** of this publication in former years. The former index, which made no pretence to the reliability of the new one, was made by dividing the gross value of manufactures by the index number of the prices of manufactured goods. The central electric stations were included in the former index, while they are excluded from the new one. However, the former index covered the period 1917 to 1923 not covered in the new one and, since this earlier period was one of wide fluctuations in money values, the following index numbers are given for the whole period since 1917, using the earlier method, but excluding central electric stations, for the years 1917 to 1923 and the new index, transposed to the 1917 base, from 1923 to 1930: 1917, 100·0; 1918, 102·0; 1919, 98·1; 1920, 95·0; 1921, 86·1; 1922, 96·0; 1923, 104·8; 1924, 102·9; 1925, 112·7; 1926, 128·1; 1927, 136·5; 1928, 148·8; 1929, 157·5; 1930, 142·8.

Consumption of Manufactured Products.—One of the beneficial results of placing the classification of external trade and of production upon a common basis is exhibited in Table **6**, where the value of commodities made available for consumption in Canada is derived from the statistics of the two important fields. For example, the value of all manufactured commodities made available in a period approximately corresponding to 1930 was $3,610,328,443, a figure obtained by adding to the value of manufactured products in 1930 the value of the imports of manufactured and partly manufactured goods during the fiscal year ended Mar. 31, 1931, and deducting the value of the corresponding exports for the same period. In this table more accurate statistics could be presented were it possible to exclude from the gross value of manufactured products the duplications involved when the products of one manufacturing establishment become the materials worked upon in another. Iron, vegetable, wood and paper, textiles and animal products were, in that order, the leading groups in the value of finished goods made available for consumption. The large amount of manufactured vegetable products made available for consumption was due to the large domestic production, as the exports and imports were about equal, while manufactures of textiles and iron and steel products, in addition to a large production, showed an excess of imports over exports of $98,000,000 for textiles and $149,000,000 for iron and steel products. Wood and paper, animal and non-ferrous metal products were manufactured in Canada in greater quantities than required for home consumption, providing export balances in these groups of commodities.

6.—Consumption of Manufactured Products, by Groups, 1930, with Totals for 1922-29.

NOTE.—Statistics of manufacturing production are for the calendar year. Imports and exports of manufactured and partly manufactured goods are for the fiscal years ended Mar. 31 of the following years.

Group of Industries.	Value of Manufactured Products.	Manufactured and Partly Manufactured Goods.		Value of Manufactured Products Available for Consumption.[1]
		Value of Net Imports.	Value of Domestic Exports.	
	$	$	$	$
Vegetable products	672,023,666	109,552,549	88,469,074	693,107,141
Animal products	417,540,878	30,104,570	44,448,811	403,196,637
Textile products	361,814,733	103,779,840	6,079,690	459,514,883
Wood and paper products	636,599,911	43,367,938	219,332,521	460,635,328
Iron and its products	569,745,973	187,908,976	38,936,076	718,718,873
Non-ferrous metal products	250,458,721	53,723,801	59,006,916	245,175,606
Non-metallic mineral products	216,812,827	55,135,444	7,346,964	264,601,307
Chemicals and allied products	119,969,637	35,068,281	12,825,852	142,212,066
Miscellaneous industries	57,966,137	57,186,834	13,662,566	101,490,405
Central electric stations	126,038,145	91,332	4,453,280	121,676,197
Totals, 1930	**3,428,970,628**	**675,919,565**	**494,561,750**	**3,610,328,443**
Totals, 1929	**4,029,371,340**	**939,226,894**	**690,904,225**	**4,277,694,009**
Totals, 1928	**3,738,484,728**	**954,468,018**	**702,314,797**	**3,990,637,949**
Totals, 1927	**3,394,713,270**	**825,147 919**	**648,178,000**	**3,571,683,189**
Totals, 1926	**3,221,269,231**	**767,022,008**	**673,709,266**	**3,314,581,973**
Totals, 1925	**2,948,545,315**	**671,462,940**	**695,325,245**	**2,924,683,010**
Totals, 1924	**2,695,053,582**	**576,031,243**	**591,598,479**	**2,679,486,346**
Totals, 1923	**2,781,165,514**	**639,343,645**	**591,829,306**	**2,828,679,853**
Totals, 1922	**2,482,209,130**	**574,551,323**	**515,173,415**	**2,541,587,038**

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[1] For 1928 to 1930 foreign products imported and later re-exported are eliminated from the value of products available for consumption, but for 1927 and previous years this was impossible since foreign exports for these years had never been analysed as raw materials or partly or fully manufactured goods. Therefore in this table the value of manufactured products made available for consumption, for the years 1922 to 1927 inclusive, is an overstatement by the amount of the foreign exports of manufactured goods in each year, probably varying from about $11,000,000 in 1922 to $18,000,000 in 1927.

Section 2.—Production of Industrial Groups and Individual Industries.

One of the factors in the progress of Canada is the possession of many natural resources favourable to industrial growth. It is upon the country's agricultural resources, forests, minerals and wild life that Canada's industries are mainly based. The sea and lake fisheries also make an important contribution of raw materials to the manufacturing industries of the Dominion. Nevertheless, the industrial development of Canada was a matter of small beginnings and gradual growth over a period of many years, and the comparatively small home market, restricted at the present time to a population of about ten millions, a large part of it in scattered agricultural areas, is still one of the difficulties of the situation. Yet Canada is now not merely the second largest manufacturing country in the British Empire; her exports to the other Dominions consist largely of manufactured goods and her exports of manufactured and partly manufactured goods to the United States exceed the exports of raw materials. The rate at which this movement is to continue will depend almost entirely upon growth within the Dominion—upon the further development of the many-sided physical assets of the country.

Subsection 1.—Manufactures Grouped by Chief Component Materials.

A classification based on the chief component materials in the various products of each manufacturing establishment was applied for the first time in the compilation of the returns for 1920. The number of groups was reduced from fifteen to nine to correspond with the external trade classification and the classes of industry were somewhat altered to conform with recent industrial developments. Subsequently the central electric stations industry was taken out of the miscellaneous class and now forms a class by itself.

Vegetable Products.—Though first in value of gross production in 1930, this group ranked only fourth in the number of people employed and salaries and wages paid. With the exception of rubber, coffee and spices, sugar factories, and rice mills, the industries of this group are dependent mainly upon domestic farm products for their raw materials. They produced, in 1930, 19·6 p.c. of the total manufacturing production and employed 13·1 p.c. of all persons engaged in manufacturing industries.

The flour-milling industry is the leading industry of the group from the point of view of gross value of products. This industry, which has existed to meet the domestic needs for more than 300 years, is one of the Dominion's oldest manufactures, but it is only within recent times that its progress has become spectacular. The War and the demand it created gave a great impetus to this trade. The 383 flour mills, many of them of the most modern type and highest efficiency, have a capacity far in excess of Canada's demands. During 1928, productive capacity reached about 121,000 barrels per day. Since then, the industry has been adversely affected by the difficulties which beset the Canadian grain trade and the great decline in the prices of grains. Exports of wheat flour declined from 10,737,266 barrels in 1928 to 7,514,778 barrels in 1930, but in spite of the decrease Canada continues to be one of the leading exporters of wheat flour.

The rubber industry is another industry of importance in the industrial life of the country. Canada now ranks among the leading countries of the world as a manufacturer of rubber goods. In 1930, she was the fifth largest importer of raw rubber in the world, ranking after the United States, the United Kingdom, France and Germany. Existing plants in 1930 numbered 47 and represented a capital investment of $69,164,512 including equipment and working capital. These plants furnished employment to 15,163 persons who received $15,895,479 in salaries and wages and produced goods valued at $73,752,673. They also used raw materials to the value of $28,821,759, mainly imported from tropical countries. The rubber industry also forms an adjunct of considerable importance to the cotton yarn and cloth industry which supplies tire fabrics. The industry, besides supplying the domestic market, contributes materially to the export trade of Canada. The products find their way to the remotest parts of the world as a glance at the list of countries to which rubber tires are shipped would show. Spain, Peru, Dutch East Indies, Portuguese Africa and China are but a few of the far-flung countries into which Canadian tires find their way.

The fruit and vegetable preparations industry which includes canned fruits, canned vegetables, pickles, vinegar, jams, etc., comprises another large division of this group. In 1930, this industry reported an output valued at $43,093,752, a capital investment of $46,135,025 and an employment of 10,651 persons who received $5,634,355 in salaries and wages. The development of the canned foods trade has affected great changes in the relation of foods to seasons. Fruits and vegetables of many kinds are to be had at all times of the year with much of their original freshness and flavour. The producers in the country are provided with an enormously extended market and the consumers in both city and country with cheap and wholesome food in great variety. The industry has made rapid strides in the past few years. During the period of 1923-30 the volume of fruit and vegetable preparations produced increased 149·0 p.c. This growth is indeed remarkable as it represents a corresponding increase in the domestic demand for these products, the foreign trade being relatively small as compared with the domestic production. Imports in 1930 were valued at $6,819,532 and exports at $2,706,661. According to these figures, the industry supplies about 92 p.c. of the domestic requirements.

The sugar-refining industry is also of substantial importance. The demands created by the War gave it a great impetus. All things considered 1919 was a record year. The number of persons employed (3,491), the value added by manufacture ($16,321,882) and the exports ($22,953,135) were the highest recorded while the volume of sugar manufactured was only 10 p.c. lower than that of the peak year 1925 when 11,714,967 cwt. was produced. Since 1925, however, exports of sugar have declined with the result that production and employment slackened considerably. In 1930, the 8 sugar refineries reported a capital investment of $43,855,155 and a value of production of $42,935,722. They also employed 2,281 persons who received $3,560,260 in salaries and wages, and paid out $30,610,701 for materials. Exports of sugar in 1930 amounted to 218,150 cwt. valued at $1,025,073.

The beverages industry—breweries, distilleries and wineries—which are important elements of the vegetable products group, have expanded from a production of $30,000,000 in 1922 to $87,000,000 in 1930, owing partly to the modification of prohibition laws in Canada and also to the fact that a large part of their production is exported directly or indirectly to the United States. The tobacco industry, another important factor in the vegetable products group, had a total production in 1930 of nearly $86,000,000 and a payroll of 8,905 persons who received $7,837,711 in salaries and wages.

Animal Products.—Production in this group is determined, in large measure, by the demand at home and abroad for Canadian butter, cheese, canned fish, fresh or frozen meats, bacon and hams, condensed and evaporated milk, etc.

The leading industry of the group is that of slaughtering and meat packing, with a value of production in 1930 of $164,029,953. Next comes butter and cheese with a value of $113,018,789. These two industries produced about two-thirds of the production of the entire group.

The butter and cheese industry, which manufactures a product of farm animals, has been for many years of leading importance in Canada. Originating in the agricultural districts of the Maritime Provinces, the Eastern Townships of Quebec, and the southern counties of Ontario, it is now developing rapidly in the Prairie Provinces and in the more recent northern settlements of Quebec and Ontario. For an industry so large in the aggregate, it is unique in having shown very little tendency toward consolidation in large units, the gross production of $113,018,789 coming from no fewer than 2,698 plants, mostly small and scattered at convenient points throughout the farming communities.

The leather industries have long been established on a considerable scale, mainly, of course, because the large number of cattle raised and slaughtered provide a ready supply of hides. There are large tanneries in the eastern provinces, and no fewer than 179 boot and shoe factories were in operation in 1930, chiefly in Quebec and Ontario, representing a total capital of over $28,000,000 with an annual output of over $40,000,000 and employing 13,922 men and women. The canning and preserving of fish also calls for reference. Concentrated naturally upon the Pacific and Atlantic coasts, 699 establishments were engaged in 1930 in canning, curing and packing of various kinds of fish that were valued at $33,000,000.

Textile Products.—The principal manufactures which may be so classified are: awnings, tents and sails; cotton and jute bags; batting and wadding; carpets, mats and rugs; men's factory clothing; women's factory clothing; cordage, rope and twine; corsets; cotton and woollen waste; cotton textiles; cotton thread; cotton yarn and cloth; dyeing and finishing of textiles; dressed flax; men's furnishing goods; hats and caps; hosiery and knitted goods; linen goods; oiled and waterproof clothing; silk goods; woollen cloth; woollen textiles and woollen yarns. An output of $426,247,587 was established for this wide industrial group in the year 1929, being an increase of 2·6 p.c. over 1928. This is the highest figure attained since the depression of 1921, but it must be remembered that the index number of wholesale prices for fabrics, textiles and textile products has dropped from 303·2 in 1920 to 156·9 in 1929 and there is therefore every justification for assuming that the year 1929 was a record one in the textile industry.

In common with all other industrial groups, the textile industries of Canada felt the effects of the general depression prevailing in 1930. The output of textiles and textile products was valued at $361,814,733, a decrease of $64,432,854 or 15·1 p.c. as compared with 1929. The textile industries, however, were not as severely affected as this figure would indicate. Drastic declines in the value of raw materials with the consequent decline in the value of finished products account for the greater part of the decrease in the value of production, the yearly index of wholesale prices of fibres, textiles and textile products having dropped from 156·9 in 1929 to 140·5 in 1930, a decrease of 10·4 p.c. Therefore, the decline in the index of volume for textile products from 133·8 in 1929 to 124·4 in 1930, as shown in Table 5 on p. 416—a decline of 7 p.c.—gives a better idea as to the extent of the recession experienced by the textile group of industries in 1930.

The outstanding feature of the textile situation in Canada in 1930 was the expansion of the silk industry at a time when practically all other industries were experiencing a diminished demand for their products. Compared with 1929, the silk industry increased its output by $3,332,518 and furnished employment to 1,021 more persons.

In net production, *i.e.*, in value added by manufacture, which is a truer criterion than gross production of the place of the group in the industrial life of the country, the textile group was fourth in 1930 among the ten major groups shown in the Census of Manufactures on p. 410, being exceeded only by the wood, iron and vegetable products groups. Textiles accounted for over 10 p.c. of the net manufacturing production of Canada. As an indication of the contribution which the textile group made in 1930 to employment in the Dominion, the group stood third in both the number of employees and in salaries and wages paid, with nearly 17 p.c. of the total employees in manufacturing and 13 p.c. of the total salaries and wages paid. Again, this wide group of textiles may be regarded as two distinct divisions: (1) the spinning, weaving and knitting trades, and (2) the finishing trades. If so regarded, the first division still assumes the proportions of a very large industrial group with a gross production for 1930 of $165,571,736 ,while the second division is still larger with $196,242,997 gross production.

The hosiery and knitted goods industry, with products worth $54,117,924, ranked second in the textile group in 1930. Despite the depressed condition of the textile industry generally, the volume and value of production in this branch of the industry held up remarkably well, the value of production being $6,457,243 or 10·9 p.c. lower than the peak year of 1929. Employment only declined by 883 or 4·7 p.c.

The production of hosiery of all kinds ranked first in importance with an output valued at $21,112,263. Next in order came underwear, combination and separate garments with a value of $15,812,529. Various other knitted and woven goods accounted for $13,518,933, while yarns and numerous small sundries made up the balance.

The industry is located chiefly in the province of Ontario; 105 of the 158 establishments were located there and produced $36,911,433 or almost 70 p.c. of the entire output. The province of Quebec followed with an output of $13,004,533 or slightly over 24 p.c. of the total.

Wood and Paper.—An outstanding feature of the general expansion of Canadian commerce since the opening of the century has been the change in the industries associated with forestry. Lumber output has shown wide fluctuations, being so largely dependent upon building and construction operations which are themselves subject to wide cyclical fluctuations. Furthermore, the increasing adoption of fireproof types of construction has resulted in a lower lumber consumption in proportion to the total building done. Thus the quantity of lumber sawn in 1911 has never since been equalled, the total being 4,918,000 M board feet compared with 3,989,421 M feet in 1930, the exports amounting to 35 to 40 p.c. of the total in each year. In contrast with this is the progress in pulp and paper production. The census of 1881 recorded only 36 paper and 5 pulp-mills in existence in Canada. In 1930 there were 109 pulp and paper-mills, consuming more than 4,741,349 cords of pulpwood in the year and using hydro-electric power to the extent of over 5 billion k.w.h. Production of wood pulp in 1917 was 1,464,308 tons and in 1930, 3,619,345 tons. Production of newsprint in 1917 was 689,847 tons, in 1921, 805,114 tons, in 1923, 1,252,000 tons and in 1924, 1,388,081 tons, while in 1930, the production was 2,497,952 tons. Included in the totals are hanging and poster papers. Canadian production in 1930 exceeded that of the United States by 95 p.c., so that Canada now occupies first place among the countries of the world in the production of newsprint paper.

Iron and Its Products.—The manufacture of iron and steel and their products is one of Canada's basic industries. Iron ore is not now produced in Canada as the known deposits, though extensive, are not of sufficiently high grade to permit economic recovery under present conditions. Yet there has been built up a primary steel industry of considerable importance and the secondary or fabricating industries have been expanding steadily to meet the country's increasing requirements.

There are now four concerns which make pig iron in Canada, one being in Nova Scotia and three in Ontario. The former uses Nova Scotia coal and iron ore from the great Wabana deposits which it controls on Bell island, Newfoundland, while the Ontario works are dependent on foreign ore and coal which are brought from the United States. These companies have blast furnaces with a rated capacity of 1·5 million tons of pig iron per annum but the highest tonnage yet attained was 1,080,160 long tons in 1929. Open hearth steel furnaces and rolling-mills are also operated by these companies which produce steel ingots, blooms and billets, bars, rods, rails, structural shapes, plates, sheets, rail fastenings, etc. Including electric steel furnaces, there were 27 steel plants in operation in 1930 which, with the 16 rolling mills, 4 pig iron plants and 2 ferro-alloy plants, represented a capital of $112,000,000 and employed 9,723 hands to produce primary products worth $52,588,935.

Among the secondary industries, the production and maintenance of railway cars, locomotives and parts is of first importance. In 1930, there were 37 plants for this purpose and 25,952 workers were employed. The value of products was $104,922,701, which was $22,000,000 lower than in 1929.

Automobile manufacturing is one of Canada's largest industries with 12,541 employees, products valued at $101,677,487 and a capital investment of $90,671,678 in 1930. This was not a representative year and the figures are hardly indicative of the real importance of the industry. In 1929, for instance, 16,435 people were employed in the 17 plants then in operation and cars and parts worth $177,315,593 were produced for the home and export markets. Recently a number of new auto and truck factories have been established in Canada so that there are now 21 factories in operation with a yearly capacity of about 400,000 vehicles.

The export trade in automobiles and parts reached its peak in 1929 when cars and parts worth $47,005,671 were shipped to other countries. In 1930 this market declined to $20,386,354.

There are also numerous works for the manufacture of machinery, agricultural and implements, sheet metal products, foundry products and similar articles of iron steel and the variety of products made in these establishments is increasing yearly.

Non-Ferrous Metals.—Rapid development of Canada's resources in the field of non-ferrous metals, the completion of large electric power projects and the more extensive use of electrical equipment, has led to a spectacular increase in this group of manufactures in recent years. The importance of the non-ferrous metals as a factor in Canada's economic life may be judged by the fact that in 1930 in a year of depression and declining prices the output of the 428 works reached a value of $250,458,721. This compares with $283,545,666 in 1929 and $183,501,723 in 1926. Capital invested in these factories in 1930 was $325,605,549 and the number of employees was 38,756.

The production of electrical apparatus is eighth in importance among all manufacturing industries and growth has been rapid in the last few years. From a value of $51,000,000 in 1923 the output advanced to $113,796,002 in 1929 and then suffered a decline in 1930 to $104,577,790. Capital has advanced in the same period from $65,077,942 to $102,979,896 and employees from 13,268 to 20,568. A total of 149 plants were engaged in this line of manufacture in 1930. Radio has contributed a great deal to this growth, the output in 1930 being 170,082 sets worth $19,196,936 at factory prices.

The smelting and refining of non-ferrous metals has also shown a rapid gain. Within the last year or so two new copper refineries and two smelters have been added to Canada's metallurgical works. In 1930 the 13 smelters or refineries in operation reported a capital investment of $163,092,471 and employed 8,626 workers. The value of smelter and refinery products was $100,946,136, including aluminium, nickel, cobalt, blister copper, electrolytic copper, zinc, lead, silver, gold, cadmium, bismuth, platinum, palladium, and other refinery products.

Exports of non-ferrous metals and their products reached nearly $116,000,000 in 1930.

Non-Metallic Minerals.—This group of manufactures includes such leading industries as coke making, oil refining, the manufacture of glass, artificial abrasives, bricks, cement, etc. Final figures for 1930 show that the output for this group was $25,000,000 or 10·4 p.c. below the corresponding total for 1929.

The petroleum-refining industry is by far the largest of the group. Canada produces some crude oil but the bulk of the oil treated in Canadian refineries is imported from United States or South America. In 1930 there were 15 refineries operating at advantageous points across the Dominion. These units used 1,064,434,974 gallons of crude oil in that year and produced refined commodities worth $90,809,711. About 5,030 people were given employment and the capital investment was $69,077,982.

Chemicals and Allied Products.—That chemical manufactures occupy an important place in Canadian industry is apparent from the fact that in 1930 an average of 15,503 persons were employed in the 591 plants which made chemicals and allied products. These plants produce the greater part of the chemicals that are consumed in this country. In 1930 the apparent consumption of chemicals and allied products amounted in value to $140,000,000, of which $120,000,000 or 85 p.c. was of domestic manufacture.

Chemicals and like products of great diversity are made in Canada but paints, soaps, medicinals, acids and chemical salts are most important. Production from the 17 plants in the heavy chemical industry, which represents a capital of $52,000,000 normally amounts to about $20,000,000 and in 1929 was up to $28,000,000. Acetic acid, calcium cyanamide, sodium cyanide, caustic soda, soda ash, sulphuric acid, phosphorus, calcium carbide and nitre cake are among the leading products. The export trade in these commodities amounted to about $11,000,000 in 1930.

The paints industry employed 2,835 workers in 1930 and paid $4,307,998 in salaries and wages. Production in that year was valued at $23,966,502. The soap industry is next in importance, there being 68 factories in this line of manufacture with output worth $18,167,838. The production of medicinals and pharmaceuticals was worth $17,768,806 and 2,833 people worked in the 144 factories in this industry. Compressed gases, fertilizers, coal-tar products, wood-distillation products, inks, adhesives, polishes, and a multitude of other such products are also made in the chemical plants.

Many chemical products are also made in industries which for statistical purposes are not included in the chemicals and allied products group. For instance, pulp and paper, distilled liquors, brewery products, and artificial abrasives are classified in other groups. By extending the scope of the chemical industry to include these other factories which primarily use chemical processes, approximately 100,000 workers would be employed and production would total about $631,000,000.

Central Electric Stations.—This industry is shown under the totals by groups in Table 7 as a separate group in order to facilitate the presentation of statistics of power installed in the other groups and industries.

The principal statistics of each of the manufacturing industries of Canada during 1930 are presented in Table 7 on pp. 424–429.

7.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of

No.	Group and Kind of Industry.	Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	$	No.	No.	$
	Canada	**24,020**	**5,203,316,760**	**70,525**	**22,418**	**184,239,117**
	Totals by Provinces.					
1	Prince Edward Island	267	3,441,958	147	38	196,878
2	Nova Scotia	1,302	133,671,163	1,456	433	3,341,727
3	New Brunswick	924	140,611,530	1,356	386	3,155,093
4	Quebec	7,410	1,727,064,388	20,353	5,575	52,328,030
5	Ontario	9,888	2,431,369,848	35,747	13,211	97,716,795
6	Manitoba	937	188,413,164	3,177	930	8,048,138
7	Saskatchewan	750	65,486,140	1,775	362	3,639,629
8	Alberta	845	109,930,271	1,934	446	4,432,443
9	British Columbia and Yukon	1,697	403,328,298	4,580	1,037	11,380,384
	Totals by Groups.					
1	Vegetable products	5,041	569,403,769	7,900	2,871	21,272,082
2	Animal products	4,341	233,334,972	7,908	1,894	15,345,127
3	Textiles and textile products	1,886	368,567,643	6,358	3,362	18,968,278
4	Wood and paper products	7,816	1,221,357,252	15,790	4,796	43,065,048
5	Iron and its products	1,196	757,797,256	13,166	3,479	36,033,814
6	Non-ferrous metal products	429	325,605,549	5,571	1,952	15,278,725
7	Non-metallic mineral products	1,234	336,018,922	3,281	731	8,011,167
8	Chemicals and allied products	591	168,119,152	3,163	1,260	9,339,815
9	Miscellaneous industries	452	84,912,229	1,661	635	4,476,932
10	Central electric stations	1,034	1,138,200,016	5,727	1,438	12,448,129
	Group 1.—Vegetable Products.					
	Totals	**5,041**	**569,403,769**	**7,900**	**2,871**	**21,272,082**
1	Biscuits, confectionery, chocolates, etc	280	54,403,093	1,410	662	3,607,864
2	Bread and other bakery products	2,697	51,914,170	700	391	1,669,572
3	Breweries	73	67,637,142	687	118	2,250,850
4	Coffee, tea and spices	60	13,658,248	283	138	930,697
5	Distilleries	15	61,533,825	284	64	878,670
6	Feed mills	894	6,352,859	20	8	36,810
7	Flour mills	383	56,264,148	799	185	1,975,066
8	Foods, breakfast	14	8,430,942	37	25	122,346
9	Foods, stock and poultry	18	1,944,821	47	32	146,327
10	Foods, miscellaneous	46	5,878,827	75	37	200,969
11	Fruit and vegetable canning, evaporating, etc	249	35,119,475	385	163	820,917
12	Ice cream cones	11	634,013	10	6	23,877
13	Linseed oil and oil cake	8	3,426,727	32	4	92,495
14	Macaroni, vermicelli, etc	13	1,835,319	25	10	42,162
15	Malt and malt products	7	7,962,510	51	7	136,413
16	Maple syrup and sugar	3	1,389,167	8	6	39,575
17	Pickles, vinegar, sauces, etc	62	11,015,550	141	46	385,886
18	Rice mills	4	767,722	15	2	59,823
19	Rubber goods, including rubber footwear	47	69,164,512	1,523	496	3,739,599
20	Sugar refineries	8	43,855,155	231	63	908,670
21	Tobacco, cigars and cigarettes	103	51,376,115	1,015	375	2,861,409
22	Wines	44	8,557,966	76	13	187,587
23	All other industries	2	6,278,463	46	20	154,498
	Group 2.—Animal Products.					
	Totals	**4,341**	**233,334,972**	**7,908**	**1,894**	**15,345,127**
1	Animal oils and fats	6	885,412	8	4	25,148
2	Belting, leather	9	1,388,322	21	10	80,715
3	Boot and shoe findings, leather	14	1,368,338	32	2	85,478
4	Boots and shoes, leather	179	28,162,582	877	343	2,370,504
5	Butter and cheese	2,698	50,502,406	3,727[1]	721[1]	4,935,243[1]
6	Condensed milk	26	8,086,430	175	62	394,754
7	Fish curing and packing	699	30,827,607	529	62	918,952
8	Fur dressing and dyeing	10	1,215,702	54	5	161,012
9	Fur goods	216	11,592,105	382	211	1,049,374
10	Gloves and mittens, leather	47	3,020,539	139	36	280,799
11	Hair goods, animal	5	699,164	14	8	60,173
12	Hair goods, human	3	22,011	–	1	780
13	Harness and saddlery	175	3,316,177	84	21	156,842
14	Leather goods, n.e.s	38	1,405,202	58	32	152,946
15	Leather tanneries	82	26,092,825	250	58	845,419
16	Sausage and sausage casings	40	1,224,025	27	5	69,707
17	Slaughtering and meat packing	76	60,778,996	1,451	288	3,539,917
18	Trunks and bags	18	2,747,129	80	25	217,364

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[1] Primary Power: see pp. 462 to 464.

Materials and Value of Products of Canadian Manufacturing Industries, 1930.

Wage-Earners.			Power Installed.	Cost of Fuel Used.	Cost of Materials.	Values of Products.		No.
Male.	Female.	Wages.				Net.	Gross.	
No.	No.	$	H.P.	$	$	$	$	
431,463	**120,033**	**551,853,649**	**7,105,452**[1]	**56,518,747**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**	
1,116	754	591,228	7,220[1]	114,793	2,546,827	1,708,139	4,254,966	1
15,739	3,441	14,195,963	225,851[1]	2,916,336	44,506,178	41,296,743	85,802,921	2
13,508	3,172	11,833,348	189,274[1]	1,743,591	33,897,264	29,570,998	63,468,262	3
131,433	47,441	164,507,645	2,823,590[1]	15,165,061	462,244,278	560,036,409	1,022,280,687	4
203,119	55,400	273,064,657	2,358,829[1]	27,044,693	836,666,780	876,358,542	1,713,025,322	5
18,787	3,594	25,893,097	403,653[1]	2,521,758	74,761,265	67,663,725	142,424,990	6
4,679	432	5,589,964	130,806[1]	2,003,206	35,608,157	26,668,609	62,276,766	7
10,255	1,464	12,659,590	173,147[1]	1,513,551	53,621,884	40,692,898	94,314,782	8
32,827	4,335	43,518,157	793,082[1]	3,495,758	123,131,269	117,990,663	241,121,932	9
49,025	24,386	63,987,161	313,527	6,523,849	357,510,340	314,513,326	672,023,666	1
35,417	12,438	40,219,271	105,833	3,040,109	285,328,411	132,212,467	417,540,878	2
40,099	59,757	78,934,818	171,324	3,377,826	184,563,865	177,250,868	361,814,733	3
125,048	11,090	131,341,841	2,126,515	12,671,180	268,249,293	368,350,618	636,599,911	4
100,644	2,698	129,395,794	576,609	9,649,582	281,713,862	288,032,111	569,745,973	5
26,672	4,561	37,040,302	401,817	3,577,638	111,738,411	138,720,310	250,458,721	6
25,099	757	31,229,998	213,917	13,103,310	107,206,674	109,606,153	216,812,827	7
8,493	2,587	11,701,974	87,382	1,572,930	48,165,038	71,804,599	119,969,637	8
10.273	1,759	13,163,176	54,820	407,444	22,508,008	35,458,129	57,966,137	9
10,693	–	14,839,314	5,572,561	2,594,879	–	126,038,145	126,038,145	10
49,025	**24,386**	**63,987,161**	**313,527**	**6,523,849**	**357,510,340**	**314,513,326**	**672,023,666**	
4,497	5,722	7,496,804	20,419	550,108	25,044,901	33,014,701	58,059,602	1
14,414	2,231	17,774,961	15,068	1,648,236	36,582,843	37,012,051	73,594,894	2
3,785	52	4,505,784	22,850	561,462	16,534,273	40,986,816	57,521,089	3
685	452	1,137,851	3,110	44,034	17,328,532	7,049,915	24,378,447	4
1,186	431	1,557,264	9,704	442,564	6,616,520	18,309,341	24,925,861	5
1,220	2	757,079	36,833	81,600	16,853,969	3,497,453	20,351,422	6
3,559	130	3,910,158	83,031	417,301	102,823,717	21,680,807	124,504,524	7
268	123	489,299	3,749	75,618	2,553,523	4,045,919	6,599,442	8
127	15	153,608	1,345	8,451	1,939,303	1,132,615	3,071,918	9
302	179	433,563	3,754	97,563	3,821,039	3,239,120	7,060,159	10
2,986	5,603	3,334,678	12,641	307,074	19,816,763	11,641,652	31,458,415	11
71	28	65,077	68	23,224	116,410	371,241	487,651	12
212	2	233,069	1,887	27,763	6,476,883	933,550	7,410,433	13
121	84	124,149	1,597	6,910	726,478	519,669	1,246,147	14
161	–	249,713	5,294	168,688	2,597,715	2,219,838	4,817,553	15
29	1	30,842	36	7,203	1,016,234	339,036	1,355,270	16
704	623	1,092,874	3,175	113,786	6,320,016	5,315,321	11,635,337	17
46	–	46,586	335	360	1,107,017	260,084	1,367,101	18
9,333	3,811	12,155,880	62,928	625,037	28,821,759	44,930,914	73,752,673	19
1,889	98	2,651,590	18,078	1,029,175	30,610,701	12,325,021	42,935,722	20
2,768	4,747	4,976,302	2,536	89,101	24,286,734	61,385,052	85,671,786	21
285	39	373,642	794	22,485	2,616,290	2,408,967	5,025,257	22
377	13	436,388	4,295	176,106	2,898,720	1,894,243	4,792,963	23
35,417	**12,438**	**40,219,271**	**105,833**	**3,040,109**	**285,328,411**	**132,212,467**	**417,540,878**	
103	4	118,981	333	21,273	219,911	210,464	430,375	1
126	–	132,141	336	7,174	488,490	337,636	826,126	2
199	43	206,953	1,934	15,748	510,787	521,413	1,032,200	3
7,785	4,917	10,487,558	6,127	112,804	20,521,726	19,957,185	40,478,911	4
7,275	257	8,136,673	26,552	1,069,453	80,559,841	32,458,948	113,018,789	5
572	41	671,638	3,851	321,998	2,521,960	11,082,783	13,604,743	6
6,193	3,774	3,383,902	13,327	410,900	21,081,489	11,891,819	32,973,308	7
480	101	514,962	898	9,544	215,625	1,410,199	1,625,824	8
1,128	1,076	2,547,377	451	21,814	9,537,657	6,196,111	15,733,768	9
593	831	951,356	356	13,627	2,244,124	1,813,405	4,057,529	10
64	31	97,884	457	6,214	475,339	437,176	912,515	11
2	5	6,424	1	–	9,434	9,124	18,558	12
474	49	461,904	491	21,446	1,076,434	992,568	2,069,002	13
294	293	501,788	141	6,001	1,047,757	1,220,802	2,268,559	14
2,645	94	2,676,062	13,578	292,933	13,162,214	6,774,101	19,936,315	15
211	14	258,579	386	14,968	1,701,441	684,599	2,386,040	16
6,738	813	8,574,750	35,814	677,421	129,004,327	35,025,626	164,029,953	17
535	95	490,339	800	16,791	949,855	1,188,508	2,138,363	18

7.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of
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No.	Group and Kind of Industry.	Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
	GROUP 3.—TEXTILES AND TEXTILE PRODUCTS.	No.	$	No.	No.	$
	Totals	**1,886**	**368,567,643**	**6,358**	**3,362**	**18,968,278**
1	Awnings, tents and sails	60	2,036,822	75	40	180,476
2	Bags, cotton and jute	23	5,631,776	82	33	316,787
3	Batting	8	2,665,952	33	23	141,541
4	Carpets	19	6,628,481	158	44	442,024
5	Clothing, factory, men's	192	26,294,787	939	392	2,464,204
6	Clothing, factory, women's	455	23,432,441	1,117	784	3,630,112
7	Cordage, rope and twine	13	12,281,660	78	24	262,606
8	Corsets	19	5,277,642	105	135	284,790
9	Cotton and wool waste	7	1,041,227	11	6	35,299
10	Cotton textiles, n.e.s	22	1,125,649	34	18	121,591
11	Cotton thread	7	4,214,075	60	29	176,820
12	Cotton yarn and cloth	33	78,542,804	412	95	1,110,927
13	Dyeing, cleaning and laundry work	387	28,351,092	731	468	2,064,474
14	Flax, dressed	10	108,203	1	–	700
15	Furnishing goods, men's	158	17,597,012	498	268	1,422,843
16	Hats and caps	153	7,274,087	376	191	1,046,993
17	Hosiery, knitted goods and fabric gloves	167	65,047,351	744	538	2,623,121
18	Linen goods	3	740,757	10	6	39,716
19	Miscellaneous textiles	11	12,892,467	172	38	618,144
20	Oiled and waterproof clothing	17	1,024,347	30	14	100,339
21	Silk and artificial silk	25	30,506,060	330	106	803,005
22	Woollen cloth	46	20,202,796	249	66	724,439
23	Woollen goods, n.e.s	25	8,476,055	76	22	234,306
24	Woollen yarn	26	7,174,100	37	22	123,021
	GROUP 4.—WOOD AND PAPER PRODUCTS.					
	Totals	**7,816**	**1,221,357,252**	**15,790**	**4,796**	**43,065,048**
1	Beekeepers' and poultrymen's supplies	7	119,448	3	2	8,780
2	Blueprinting	15	182,608	13	4	27,273
3	Boat building	122	3,123,984	89	15	209,613
4	Boxes and bags, paper	126	21,667,586	489	233	1,466,852
5	Boxes, wooden	123	10,636,465	230	47	558,729
6	Carriages, wagons and sleighs	317	7,662,388	140	26	292,586
7	Carriage and wagon materials	6	659,801	12	4	23,959
8	Clothes pins	3	278,615	6	1	15,800
9	Coffins and caskets	36	3,784,344	63	14	182,936
10	Cooperage	75	2,332,065	36	6	101,062
11	Engraving, stereotyping and electrotyping	76	9,806,326	442	176	1,388,043
12	Excelsior	10	274,992	6	4	6,918
13	Flooring, hardwood	23	6,293,271	124	19	309,381
14	Furniture	366	41,495,827	894	324	2,615,142
15	Lasts, trees and shoe findings	12	1,255,156	40	15	113,044
16	Lithographing	46	17,111,128	352	210	1,431,077
17	Miscellaneous paper products	58	8,906,509	197	121	668,200
18	Miscellaneous wooden products	171	5,757,447	90	39	265,098
19	Planing mills, sash and door factories, etc.	728	49,333,121	977	212	2,275,359
20	Printing and bookbinding	905	38,837,176	1,529	540	4,394,820
21	Printing and publishing	776	66,860,624	4,959	1,748	11,831,366
22	Pulp and paper	109	714,437,104	2,976	556	9,538,588
23	Roofing paper, wall board, etc	11	5,347,233	114	46	375,455
24	Sawmills	3,531	181,116,933	1,465	210	3,386,658
25	Sporting goods	27	2,715,746	55	31	119,688
26	Stationery and envelopes	39	6,011,637	256	116	663,469
27	Trade composition	28	793,785	31	11	98,537
28	Woodenware	14	1,033,414	35	7	84,480
29	Wood turning	39	2,127,617	48	14	98,650
30	All other industries	17	11,394,902	119	45	513,485
	GROUP 5.—IRON AND ITS PRODUCTS.					
	Totals	**1,196**	**757,797,256**	**13,166**	**3,479**	**36,033,814**
1	Agricultural implements	57	98,684,828	1,182	348	2,915,138
2	Automobiles	16	90,671,678	1,631	577	4,775,918
3	Automobile supplies	57	16,654,683	399	137	1,095,934
4	Bicycles	3	2,931,867	124	34	177,101
5	Boilers, tanks and engines	35	9,982,016	257	57	730,654
6	Bridge and structural steel work	13	28,922,951	961	97	2,740,971
7	Castings and forgings	340	100,318,189	1,912	607	5,574,926
8	Hardware and tools	133	32,259,387	601	225	1,824,029
9	Iron and steel products, n.e.s	62	11,738,866	478	89	1,197,617
10	Machinery	174	69,454,103	1,835	609	5,068,744
11	Primary iron and steel	49	112,079,926	664	130	1,992,950
12	Railway rolling stock	37	95,785,640	1,739	109	4,203,257
13	Sheet metal products	155	53,368,130	1,059	342	2,603,195
14	Wire and wire goods	65	34,944,992	324	118	1,133,380

Materials and Value of Products of Canadian Manufacturing Industries, 1930—
tinued.

Wage-Earners.			Power Installed.	Cost of Fuel Used.	Cost of Materials.	Values of Products.		No.
Male.	Female.	Wages.				Net.	Gross.	
No.	No.	$	H.P.	$	$	$	$	
40,099	**59,757**	**78,934,818**	**171,324**	**3,377,826**	**184,563,865**	**177,250,868**	**361,814,733**	
237	186	400,837	248	8,058	1,077,189	1,050,555	2,127,744	**1**
290	560	658,901	1,183	22,920	7,587,868	2,291,594	9,879,462	**2**
119	95	205,585	709	13,359	1,447,880	1,486,815	2,934,695	**3**
601	367	850,695	2,254	60,158	1,955,945	2,845,121	4,801,066	**4**
4,605	4,900	9,078,786	1,615	73,455	21,533,514	19,285,909	40,819,423	**5**
4,041	10,840	12,852,899	2,849	49,041	35,759,351	26,056,597	61,815,948	**6**
649	307	919,962	7,777	27,819	6,059,887	2,491,462	8,551,349	**7**
98	1,144	812,247	406	10,115	2,221,313	2,357,534	4,578,847	**8**
116	53	141,635	895	5,171	1,143,574	350,927	1,494,501	**9**
90	297	272,590	502	8,440	943,511	704,913	1,648,424	**10**
177	430	462,095	1,987	25,403	1,577,661	2,239,207	3,816,868	**11**
9,479	7,013	11,893,866	76,746	666,152	27,975,574	20,717,304	48,692,878	**12**
4,596	6,937	10,077,293	15,696	1,021,268	2,807,911	22,664,753	25,472,664	**13**
96	1	23,313	280	261	32,249	51,827	84,076	**14**
1,061	7,138	5,014,875	2,163	56,728	14,790,909	10,363,401	25,154,310	**15**
1,420	2,220	3,191,312	1,665	62,976	6,662,631	7,562,158	14,224,789	**16**
5,583	11,705	12,434,026	16,980	467,202	25,509,913	28,608,011	54,117,924	**17**
53	92	102,445	410	8,302	207,189	226,496	433,685	**18**
865	142	978,836	4,929	163,783	5,023,397	4,654,300	9,677,697	**19**
101	127	209,013	171	8,591	487,186	496,135	983,321	**20**
2,391	2,566	3,915,585	10,116	210,512	7,633,329	10,175,269	17,808,598	**21**
2,008	1,552	2,681,823	11,558	248,716	6,603,930	5,743,742	12,347,672	**22**
746	253	816,024	6,802	70,244	2,597,953	2,661,635	5,259,588	**23**
677	832	940,175	3,383	89,152	2,924,001	2,165,203	5,089,204	**24**
125,048	**11,090**	**131,341,841**	**2,126,515**	**12,671,180**	**268,249,293**	**368,350,618**	**636,599,911**	
30	–	25,001	69	772	93,238	89,148	182,386	**1**
57	9	61,682	100	1,860	115,454	217,422	332,876	**2**
851	6	915,493	1,452	11,087	855,944	1,831,106	2,687,050	**3**
1,996	2,344	3,454,883	7,585	98,790	10,451,641	10,384,509	20,836,150	**4**
2,716	238	2,224,104	13,200	30,886	4,256,772	4,557,144	8,813,916	**5**
1,575	12	1,646,807	3,653	67,689	2,529,361	3,569,296	6,098,657	**6**
94	–	115,849	721	7,067	237,807	230,648	468,455	**7**
169	41	111,225	725	240	171,110	330,190	501,300	**8**
601	100	694,192	2,253	18,522	1,337,718	1,848,758	3,186,476	**9**
495	1	432,759	1,878	16,777	1,634,157	889,537	2,523,694	**10**
1,728	461	3,637,442	2,113	42,495	1,456,175	7,272,564	8,728,739	**11**
75	20	59,734	1,080	613	78,617	139,592	218,209	**12**
1,539	12	1,352,970	8,090	10,056	4,225,291	2,715,249	6,940,540	**13**
10,296	466	10,159,454	21,998	358,888	13,817,450	23,048,745	36,866,195	**14**
300	162	339,989	872	8,755	239,894	892,143	1,132,037	**15**
1,931	718	3,270,312	4,269	45,109	5,540,702	8,157,215	13,697,917	**16**
914	392	1,189,814	3,410	72,981	4,815,261	4,764,459	9,579,720	**17**
1,030	93	884,420	4,360	18,886	1,686,159	2,219,085	3,905,244	**18**
8,375	87	8,706,404	49,077	150,313	19,220,215	17,263,379	36,483,594	**19**
7,088	2,410	11,268,228	10,367	146,887	11,942,885	25,998,902	37,941,787	**20**
8,722	1,634	15,105,686	22,996	349,831	15,993,916	56,019,255	72,013,171	**21**
28,911	764	36,236,388	1,634,784	10,633,286	81,992,255	133,681,991	215,674,246	**22**
326	6	393,535	1,487	70,238	2,652,398	2,821,592	5,473,990	**23**
41,704	78	25,126,243	316,176	305,262	72,956,762	48,186,223	121,142,985	**24**
442	94	492,445	1,415	13,838	950,274	1,369,654	2,319,928	**25**
513	753	1,063,877	1,216	18,794	4,091,247	3,006,827	7,098,074	**26**
184	3	296,489	97	7,245	42,214	616,631	658,845	**27**
525	20	311,589	1,008	2,660	458,066	574,135	1,032,201	**28**
469	62	352,209	2,703	6,542	607,713	733,415	1,341,128	**29**
1,392	104	1,412,618	7,361	154,811	3,798,597	4,921,804	8,720,401	**30**
100,644	**2,698**	**129,395,794**	**576,609**	**9,649,582**	**281,713,862**	**288,032,111**	**569,745,973**	
5,807	68	6,648,911	25,426	449,525	11,353,523	15,548,616	26,902,139	**1**
10,197	136	14,697,864	42,379	659,673	66,924,019	34,753,468	101,677,487	**2**
2,809	235	3,431,245	11,743	185,765	10,682,111	7,719,476	18,401,587	**3**
309	28	418,540	1,018	17,090	1,384,866	578,081	1,962,947	**4**
1,605	5	1,919,150	7,881	95,309	4,565,856	5,031,383	9,597,239	**5**
3,885	–	5,945,091	23,091	168,364	12,549,435	13,506,348	26,055,783	**6**
17,688	292	20,296,335	62,420	1,304,060	28,262,602	45,971,069	74,233,671	**7**
4,647	747	4,893,163	16,270	284,236	6,713,290	14,760,865	21,474,155	**8**
2,521	14	3,218,104	7,913	58,548	5,798,796	7,113,514	12,912,310	**9**
8,420	180	10,021,143	33,646	345,898	18,326,621	35,422,861	53,749,482	**10**
8,906	23	12,941,375	204,639	3,757,087	22,765,648	29,823,287	52,588,935	**11**
24,068	36	33,421,793	107,698	1,729,627	60,289,445	44,633,256	104,922,701	**12**
6,604	723	7,849,692	17,027	342,729	25,090,342	21,977,137	47,067,479	**13**
3,178	211	3,693,388	15,458	251,671	7,007,308	11,192,750	18,200,058	**14**

7.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of
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No.	Group and Kind of Industry.	Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
	GROUP 6.—NON-FERROUS METAL PRODUCTS.	No.	$	No.	No.	$
	Totals	**429**	**325,605,549**	**5,571**	**1,952**	**15,278,725**
1	Aluminium products	14	5,217,665	131	42	327,731
2	Brass and copper products	117	26,820,527	781	224	1,986,431
3	Electrical apparatus and supplies	149	102,979,896	3,568	1,348	9,620,479
4	Jewellery and silverware	96	10,159,074	287	194	968,434
5	Lead, tin and zinc products	23	4,612,408	72	40	248,286
6	Miscellaneous non-ferrous metal products	16	805,293	42	6	117,469
7	Non-ferrous metal smelting and refining	14	175,010,686	690	98	2,009,895
	GROUP 7.—NON-METALLIC MINERAL PRODTS.					
	Totals	**1,234**	**336,018,922**	**3,281**	**731**	**8,011,167**
1	Abrasive products	13	6,251,425	80	26	244,054
2	Aerated and mineral waters	385	14,934,798	486	104	1,005,618
3	Asbestos products	11	2,316,645	44	16	131,990
4	Cement	11	59,210,737	116	10	267,003
5	Cement products	146	5,157,051	178	17	337,658
6	Clay products from domestic clay	203	33,430,777	345	54	922,499
7	Clay products from imported clay	15	4,099,965	70	24	247,562
8	Coke and gas products	41	89,987,235	703	244	1,561,727
9	Glass products	62	15,962,392	268	85	780,556
10	Lime	50	8,816.879	80	11	148,525
11	Miscellaneous non-metallic mineral products	24	11,197,039	116	20	276,186
12	Petroleum products	28	70,334,381	460	63	1,317,159
13	Salt	8	4,685,549	42	10	107,637
14	Sand-lime brick	11	2,165,362	21	1	61,663
15	Stone, monumental and ornamental	226	7,468,687	272	46	601,330
	GROUP 8.—CHEMICALS AND ALLIED PRODTS.					
	Totals	**591**	**168,119,152**	**3,163**	**1,260**	**9,339,815**
1	Acids, alkalies and salts	17	52,314,567	351	37	888,220
2	Adhesives	12	1,921,406	40	10	117,111
3	Coal tar distillation	10	5,042,373	28	5	89,412
4	Explosives, ammunition and fireworks	10	14,440,452	117	8	297,820
5	Fertilizers	14	4,139,498	40	16	94,958
6	Flavouring extracts	24	1,587,091	72	35	141,029
7	Gases, compressed	30	5,020,875	166	76	427,146
8	Inks	22	2,457,836	109	30	442,455
9	Medicinal and pharmaceutical preparations	144	18,843,192	652	403	2,008,710
10	Miscellaneous chemical products	75	10,775,475	227	136	687,590
11	Paints, pigments and varnishes	78	26,212,828	715	251	2,281,880
12	Polishes and dressings	32	1,414,276	50	15	129,801
13	Soaps and washing compounds	68	18,340,715	471	121	1,284,064
14	Toilet preparations	48	3,345,387	110	117	416,326
15	Wood distillates and extracts	7	2,263,181	15	-	33,293
	GROUP 9.—MISCELLANEOUS INDUSTRIES.					
	Totals	**452**	**84,912,229**	**1,661**	**635**	**4,476,932**
1	Advertising and other novelties	16	503,406	23	17	57,014
2	Aircraft	6	2,101,232	46	20	128,317
3	Artificial flowers and feathers	6	184,836	6	10	12,556
4	Brooms, brushes and mops	76	4,109,862	159	74	377,972
5	Buttons	12	1,408,331	39	17	125,767
6	Candles	10	539,845	12	5	38,922
7	Fountain pens	6	1,695,844	60	33	158,128
8	Ice, artificial	37	4,927,342	50	15	121,200
9	Jewel cases and silverware cabinets	6	245,270	10	11	25,694
10	Mattresses and springs	61	8,255,703	179	71	582,798
11	Motion pictures	7	970,709	68	17	106,868
12	Musical instruments	32	9,076,086	223	119	644,948
13	Pipes, tobacco (included in all other industries)	–	–	–	–	–
14	Refrigerators	10	1,194,063	32	11	82,873
15	Regalias and society emblems	12	205,339	11	6	32,581
16	Scientific and professional equipment	23	14,513,146	96	70	377,405
17	Shipbuilding and repairs	43	31,597,501	507	57	1,192,618
18	Signs, electric	4	354,366	12	7	24,815
19	Stamps and stencils	31	646,999	50	22	132,033
20	Statuary, art goods and church supplies	27	699,460	15	17	49,560
21	Store fixtures and display forms	3	210,365	11	5	22,644
22	Toys	9	178,924	4	4	15,779
23	Typewriter supplies	4	717,478	18	13	90,374
24	Umbrellas	8	446,896	26	13	66,748
25	All other industries	3	129,226	4	1	9,318
	GROUP 10.—CENTRAL ELECTRIC STATIONS.					
	Totals	**1,034**	**1,138,200,016**	**5,727**	**1,438**	**12,448,129**

Materials and Value of Products of Canadian Manufacturing Industries, 1930—cluded.

Wage-Earners.			Power Installed.	Cost of Fuel Used.	Cost of Materials.	Values of Products.		No.
Male.	Female.	Wages.				Net.	Gross.	
No.	No.	$	H.P.	$	$	$	$	
26,672	**4,561**	**37,040,302**	**401,817**	**3,577,638**	**111,738,411**	**138,720,316**	**250,458,721**	
557	78	737,464	2,831	37,073	2,184,658	2,158,778	4,343,436	1
3,958	334	4,756,321	17,645	321,241	13,355,186	12,057,039	25,412,225	2
12,095	3,557	16,639,525	77,507	589,910	43,111,629	61,466,161	104,577,790	3
1,681	472	2,462,625	3,105	52,827	3,735,346	5,506,780	9,242,126	4
411	91	486,364	2,729	47,167	3,813,569	1,365,014	5,178,583	5
132	29	171,774	198	5,413	227,551	530,874	758,425	6
7,838	–	11,786,229	297,802	2,524,007	45,310,472	55,635,664	100,946,136	7
25,099	**757**	**31,229,998**	**213,917**	**13,103,310**	**107,206,674**	**109,606,153**	**216,812,827**	
676	17	912,587	6,150	26,961	2,313,310	4,137,041	6,450,351	1
1,750	100	2,038,833	2,768	84,147	3,667,202	9,883,205	13,550,407	2
231	15	269,500	1,899	48,663	1,327,025	974,899	2,301,924	3
2,191	–	2,905,195	80,909	3,317,351	–	17,713,067	17,713,067	4
1,052	5	1,076,385	3,138	47,034	1,261,910	2,456,794	3,718,704	5
4,627	–	4,038,631	29,291	1,654,518	–	10,593,578	10,593,578	6
668	79	804,724	1,279	177,678	834,181	2,143,962	2,978,143	7
3,017	6	4,303,075	24,365	2,186,280	17,082,364	19,510,495	36,592,859	8
2,711	324	3,425,010	7,256	828,734	4,213,885	7,977,867	12,191,752	9
995	–	939,253	6,532	826,089	–	4,038,698	4,038,698	10
506	142	648,954	8,841	88,233	1,730,577	2,444,025	4,174,602	11
4,592	19	6,872,971	30,039	3,572,348	71,800,429	19,986,776	91,787,205	12
290	39	347,902	881	188,654	–	1,694,631	1,694,631	13
203	–	203,431	1,363	33,916	215,921	455,380	671,301	14
1,590	11	2,443,547	9,206	22,704	2,759,870	5,595,735	8,355,605	15
8,493	**2,587**	**11,701,974**	**87,382**	**1,572,930**	**48,165,038**	**71,804,599**	**119,969,637**	
2,017	4	2,614,614	51,976	522,724	4,712,471	15,399,131	20,111,602	1
163	13	169,714	958	52,950	882,908	767,726	1,650,634	2
187	1	235,704	239	130,189	2,354,551	979,515	3,334,066	3
1,032	265	1,264,600	4,837	146,258	3,445,630	6,286,315	9,731,945	4
205	–	167,970	1,379	8,295	1,647,478	857,095	2,504,573	5
80	68	169,340	131	6,735	893,214	650,878	1,544,092	6
217	13	310,094	5,779	20,221	504,975	3,052,511	3,557,486	7
214	23	306,249	1,250	10,680	995,253	1,564,063	2,559,316	8
773	1,005	1,654,597	2,344	75,665	5,563,081	12,205,725	17,768,806	9
800	384	1,083,976	4,253	66,556	3,595,893	4,727,486	8,323,379	10
1,654	215	2,026,118	8,302	189,487	11,094,435	12,872,067	23,966,502	11
87	50	139,386	169	6,265	627,642	719,257	1,346,899	12
804	252	1,116,052	4,921	236,168	9,996,739	8,171,099	18,167,838	13
108	294	315,925	250	7,516	1,346,445	2,860,068	4,206,513	14
152	–	127,635	594	93,221	504,323	691,663	1,195,986	15
10,273	**1,759**	**13,163,176**	**54,820**	**407,444**	**22,508,008**	**35,458,129**	**57,966,137**	
72	122	128,801	50	1,140	311,890	264,927	576,817	1
153	20	189,632	267	8,689	366,125	902,680	1,268,805	2
8	41	28,300	6	133	48,630	88,915	137,545	3
886	224	874,696	1,659	21,576	1,802,881	2,332,858	4,135,739	4
183	158	213,824	585	8,638	199,766	502,704	702,470	5
38	20	36,338	50	4,759	187,957	224,496	412,453	6
128	113	206,137	273	2,095	863,186	1,734,482	2,597,668	7
271	4	321,693	9,948	8,348	96,871	1,526,744	1,623,615	8
40	36	65,143	105	2,195	87,116	160,042	247,158	9
1,221	263	1,467,845	4,453	40,781	4,111,434	3,921,227	8,032,661	10
61	21	122,237	21	2,451	374,583	449,047	823,630	11
1,276	110	1,469,879	4,368	81,684	4,338,816	3,912,071	8,250,887	12
–	–	–	–	–	–	–	–	13
228	4	222,070	731	2,666	391,265	615,464	1,006,729	14
23	39	51,079	21	802	93,023	134,713	227,736	15
468	268	796,457	3,234	46,571	2,768,853	4,466,813	7,235,666	16
4,569	6	5,952,975	28,183	154,283	5,060,973	11,808,949	16,869,922	17
51	–	148,321	27	2,378	96,440	235,302	331,742	18
208	10	268,398	164	5,047	109,630	565,090	674,720	19
181	156	286,781	208	3,401	389,246	690,937	1,080,183	20
54	6	65,449	86	2,269	30,430	135,001	165,431	21
49	31	50,632	83	1,591	111,590	124,215	235,805	22
51	28	101,249	193	4,557	354,228	421,632	775,860	23
34	71	71,829	34	220	278,588	176,782	455,370	24
20	8	23,411	71	1,170	34,487	63,038	97,525	25
10,693	–	**14,839,314**	**5,572,561**	**2,594,879**	–	**126,038,145**	**126,038,145**	

Subsection 2.—Manufactures Classified by the Purpose of the Products.

Production of Manufactured Goods according to the Purpose Classification.—In addition to the classification according to the chief component material of the products, used for the industrial census in detailed presentation, a separate and distinct classification, based on the chief purpose of the products, was applied for the first time to the census returns of 1922 and is presented for the years 1926 to 1929 in summary form, and for 1930 in more detail, in Table **8.**

During the period covered by the table, the gross production of the food industries dropped from 24·3 p.c. of the total for all industries in 1926 to 21·7 p.c. in 1930, while the clothing group dropped from 9·5 p.c. of the total in the former year to 8·7 p.c. On the other hand, the gross production of the "drink and tobacco" group, during the same period, rose from 4·1 p.c. of the total to 5·5 p.c. Producers' materials which stood at 29·0 p.c. in 1926 fell to 28·5 p.c. in 1929 and to 27·4 p.c. in 1930, due to the general decrease in manufacturing activity since the beginning of the general depression in the autumn of 1929. The percentage of the vehicles and vessels industries remained about stationary, being 9·3 p.c. in 1926 and 9·1 p.c. in 1930.

In analysing the relative standing of the two purpose groups which are perhaps of greatest interest, it is noted that the gross production of the food industries in 1930 was 21·7 p.c. of the output of Canadian manufacturing concerns, as compared with an output of 8·7 p.c. for the clothing industries. Aside from the fact that a much larger proportion of its products is exported, the greater production of the food group was in part due to the higher cost of raw materials, the value added by manufacturing being 13·5 p.c. of the total for all industries in the case of the food group and 8·8 p.c. for the clothing group. The clothing industries gave employment to approximately 8,000 more employees than the food industries.

8.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for 1926-30 and in Detail for 1930.

Purpose Heading.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1926.[1]							
Totals	**22,708**	**3,981,569,590**	**581,539**	**653,850,933**	**1,728,624,192**	**1,492,645,039**	**3,221,269,231**
Food	8,259	394,159,943	87,343	78,143,619	581,403,701	201,819,393	783,223,094
Drink and tobacco	574	137,139,189	15,341	16,817,622	45,115,122	85,780,145	130,895,267
Clothing	1,878	211,149,085	91,215	85,361,018	158,935,630	147,616,042	306,551,672
Personal utilities	384	50,497,988	10,633	12,470,247	24,236,592	25,487,509	49,724,101
House furnishings	543	60,277,954	15,684	16,858,549	22,673,689	32,679,963	55,353,652
Books and stationery	1,716	108,582,186	31,500	43,781,918	34,575,475	81,543,751	116,119,226
Vehicles and vessels	917	271,239,055	50,731	70,315,573	178,558,815	119,505,351	298,064,166
Producers' materials	5,807	1,404,509,475	182,599	206,672,939	453,319,993	482,446,753	935,766,746
Industrial equipment	2,457	1,313,175,892	91,956	118,162,492	213,697,326	302,683,501	516,380,827
Miscellaneous	173	30,838,823	4,537	5,266,956	16,107,849	13,082,631	29,190,480
1927.[1]							
Totals	**22,936**	**4,337,631,558**	**618,933**	**693,932,228**	**1,758,789,334**	**1,635,923,936**	**3,394,713,270**
Food	8,306	418,151,619	88,967	81,722,970	586,128,295	216,875,935	803,004,230
Drink and tobacco	570	160,100,581	16,276	18,312,164	52,850,437	106,706,731	159,557,168
Clothing	1,988	227,438,240	97,918	91,236,118	161,946,983	166,769,340	328,716,323
Personal utilities	391	54,029,497	10,754	12,758,956	26,061,404	27,133,729	53,195,133
House furnishings	553	63,578,269	17,438	19,151,982	26,474,235	36,313,804	62,788,039
Books and stationery	1,795	120,028,624	33,732	46,913,071	38,755,189	90,338,506	129,093,695
Vehicles and vessels	872	279,080,400	49,885	70,622,546	174,846,848	124,565,024	299,411,872
Producers' materials	5,762	1,521,762,956	200,335	219,116,312	450,761,472	519,850,940	970,612,412
Industrial equipment	2,533	1,460,936,792	99,200	129,147,304	224,833,327	333,530,379	558,363,706
Miscellaneous	166	32,524,580	4,428	4,950,805	16,131,144	13,839,548	29,970,692

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[1] For details for the years 1926-29 see previous editions of the Canada Year Book as follows: 1929, p. 423; 1930, p. 410; 1931, p. 431; 1932, p. 337.

8.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for 1926-30 and in Detail for 1930—continued.

Purpose Heading.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1928.[1]							
Totals	**23,379**	**4,780,296,049**	**658,023**	**755,199,372**	**1,919,438,703**	**1,819,046,025**	**3,738,484,728**
Food	8,212	440,873,879	90,373	84,096,261	605,692,720	226,907,992	832,600,712
Drink and tobacco	596	183,028,239	17,806	20,492,585	62,541,589	127,972,285	190,513,874
Clothing	2,062	242,010,963	104,008	98,069,749	179,344,512	180,265,193	359,609,705
Personal utilities	390	54,569,674	11,294	12,990,442	26,245,820	30,281,615	56,527,435
House furnishings	598	72,394,155	19,807	21,811,858	31,753,455	41,597,051	73,350,506
Books and stationery	1,893	131,944,080	36,156	51,902,487	43,090,386	100,848,835	143,939,221
Vehicles and vessels	859	296,174,301	58,022	85,268,214	200,180,697	136,215,594	336,396,291
Producers' materials	6,001	1,729,056,251	210,235	235,816,963	504,241,541	576,706,854	1,080,948,395
Industrial equipment	2,601	1,595,482,231	105,647	139,693,545	249,557,435	383,193,287	632,750,722
Miscellaneous	167	34,762,276	4,675	5,057,268	16,790,548	15,057,319	31,847,867
1929.[1]							
Totals	**23,597**	**5,083,014,754**	**694,434**	**813,049,842**	**2,032,020,975**	**1,997,350,365**	**4,029,371,340**
Food	8,351	463,984,558	94,707	87,960,036	597,396,238	240,590,146	837,986,384
Drink and tobacco	599	201,365,785	18,976	21,670,376	65,440,053	143,528,945	208,968,998
Clothing	2,054	250,215,736	106,641	100,863,405	176,130,224	186,881,746	363,011,970
Personal utilities	380	56,155,234	11,148	13,595,331	29,389,246	31,802,504	61,191,750
House furnishings	600	76,185,921	20,857	23,248,775	34,293,465	43,517,866	77,811,331
Books and stationery	1,917	144,222,275	38,141	56,003,183	45,384,362	110,563,598	155,947,960
Vehicles and vessels	781	310,942,038	61,835	91,239,185	243,258,350	164,689,298	407,947,648
Producers' materials	6,210	1,772,309,696	222,104	257,233,327	523,139,599	628,251,154	1,151,390,753
Industrial equipment	2,600	1,774,844,446	116,086	156,651,963	304,581,449	433,129,753	737,711,202
Miscellaneous	105	32,789,065	3,939	4,584,261	13,007,989	14,395,355	27,403,344
1930.							
Totals	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
Food	8,304	464,697,907	86,279	82,930,475	507,246,850	238,607,556	745,854,406
Drink and tobacco	620	204,039,846	18,365	20,635,959	53,721,019	132,973,381	186,694,400
Clothing	2,017	231,366,990	94,086	87,308,105	147,363,887	151,514,613	298,878,500
Personal utilities	373	50,613,454	9,445	11,423,383	23,820,489	26,595,608	50,416,097
House furnishings	592	74,357,090	19,328	20,679,759	27,037,565	38,780,585	65,818,150
Books and stationery	1,943	148,509,793	38,222	56,396,315	43,997,854	106,053,275	150,051,129
Vehicles and vessels	766	306,354,979	62,871	84,736,739	167,308,926	144,000,318	311,309,244
Producers' materials	6,607	1,857,834,835	203,750	222,057,875	429,118,305	518,717,241	947,835,546
Industrial equipment	2,690	1,835,713,531	108,510	145,855,520	256,513,915	392,365,334	648,879,249
Miscellaneous	108	29,828,335	3,583	4,068,636	10,855,092	12,378,815	23,233,907
Food	**8,304**	**464,697,907**	**86,279**	**82,930,475**	**507,246,850**	**238,607,556**	**745,854,406**
Breadstuffs	4,303	188,567,776	37,040	38,587,759	188,406,573	102,621,763	291,028,336
Fish	699	30,827,607	10,558	4,302,854	21,081,489	11,891,819	32,973,308
Fruits and vegetables	311	46,135,025	10,651	5,634,355	26,136,779	16,956,973	43,093,752
Meats	116	62,003,021	9,547	12,442,953	130,705,768	35,710,225	166,415,993
Milk products	2,724	58,588,836	12,830	14,138,308	83,081,801	43,541,731	126,623,532
Oils and fats	6	885,412	119	144,129	219,911	210,464	430,375
Sugar industries	11	45,244,322	2,325	3,630,677	31,626,935	12,664,057	44,290,992
Infusions	60	13,658,248	1,558	2,068,548	17,328,532	7,049,915	24,378,447
Miscellaneous	74	18,787,660	1,651	1,980,892	8,659,062	7,960,609	16,619,671
Drink and Tobacco	**620**	**204,039,846**	**18,365**	**20,635,959**	**53,721,019**	**132,973,381**	**186,694,400**
Beverages, alcoholic	88	129,170,967	6,607	9,192,568	23,150,793	59,296,157	82,446,950
Beverages, non-alcoholic	429	23,492,764	2,853	3,605,680	6,283,492	12,292,172	18,575,664
Tobacco	103	51,376,115	8,905	7,837,711	24,286,734	61,385,052	85,671,786
Clothing	**2,017**	**231,366,990**	**94,086**	**87,308,105**	**147,363,887**	**151,514,613**	**298,878,500**
Boots and shoes	179	28,162,582	13,922	12,858,062	20,521,726	19,957,185	40,478,911
Fur goods	226	12,807,807	3,437	4,272,725	9,753,282	7,606,310	17,359,592
Garments and personal furnishings	824	72,601,882	38,065	35,560,756	74,305,087	58,063,441	132,368,528
Gloves and mittens	47	3,020,539	1,599	1,232,155	2,244,124	1,813,405	4,057,529
Hats and caps	159	7,458,923	4,272	4,279,161	6,711,261	7,651,073	14,362,334
Knitted goods	167	65,047,351	18,570	15,057,147	25,509,913	28,608,011	54,117,924
Waterproofs	17	1,024,347	272	309,352	487,186	496,135	983,321
Miscellaneous textiles, n.e.s.	398	41,243,559	13,949	13,738,747	7,831,308	27,319,053	35,150,361

8.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for 1926-30 and in Detail for 1930—concluded.

Purpose Heading.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
Personal Utilities	**373**	**50,613,454**	**9,445**	**11,423,383**	**23,820,489**	**26,595,608**	**50,416,097**
Jewellery and timepieces	102	10,404,344	2,731	3,521,896	3,822,462	5,666,822	9,489,284
Recreational supplies	68	11,970,756	2,438	2,793,371	5,400,680	5,405,940	10,806,620
Personal utilities, n.e.s.	203	28,238,354	4,276	5,108,116	14,597,347	15,522,846	30,120,193
House Furnishings	**592**	**74,357,090**	**19,328**	**20,679,759**	**27,037,565**	**38,780,585**	**65,818,150**
Books and Stationery	**1,943**	**148,509,793**	**38,222**	**56,396,315**	**43,997,854**	**106,053,275**	**150,051,129**
Vehicles and Vessels	**766**	**306,354,979**	**62,871**	**84,736,739**	**167,308,926**	**144,000,318**	**311,309,244**
Producers' Materials	**6,607**	**1,857,834,835**	**203,750**	**222,057,875**	**429,118,305**	**518,717,241**	**947,835,546**
Farm materials	14	4,139,498	261	262,928	1,647,478	857,095	2,504,573
Manufacturers' materials	1,054	1,387,264,463	114,940	141,200,365	274,074,375	353,740,850	627,815,225
Building materials	4,917	376,494,821	70,234	62,147,157	125,173,512	127,285,475	252,458,987
General materials	622	89,936,053	18,315	18,447,425	28,222,940	36,833,821	65,056,761
Industrial Equipment	**2,690**	**1,835,713.531**	**108,510**	**145,855 520**	**256,513,915**	**392,365,334**	**648,879,249**
Farming equipment	64	98,804,276	7,440	9,597,830	11,446,761	15,637,764	27,084,525
Manufacturing equipment	186	70,709,259	11,561	15,542,920	18,566,515	36,315,004	54,881,519
Trading equipment	95	7,359,956	1,120	1,481,991	999,489	3,148,696	4,148,185
Service equipment	237	38,810,851	5,049	6,279,743	10,433,481	19,661,280	30,094,761
Light, heat and power equipment	1,296	1,412,871,866	49,611	70,465,039	137,048,768	232,370,596	369,419,364
General equipment	812	207,157,323	33,729	42,487,997	78,018,901	85,231,994	163,250,895
Miscellaneous	**108**	**29,828,335**	**3,583**	**4,068,636**	**10,855,092**	**12,378,815**	**23,233,907**

Subsection 3.—Manufactures Classified by Origin of the Materials.

Classification of Manufacturing Production According to the Origin of the Materials Worked Upon.—The principal statistics of the manufactures of Canada, classified upon the basis of "origin", are presented in Table 9 for the years 1926 to 1930. By this means Canadian manufacturing production may be analysed from a new angle, one by means of which interesting comparisons may be made with the external trade classification according to origin.

The distinction made between farm materials of Canadian and foreign origin is based on whether the materials are indigenous to Canada rather than their actual source. Thus the industries included in the foreign origin classes are those depending upon materials which cannot be grown in Canada such as tea, coffee, spices, cane sugar, rice, rubber, cotton, silk, etc., but it should be understood that industries included in the Canadian origin classes may be using large quantities of imported corn, fruit, tobacco, hides, wool, etc.

While the period reviewed in the following table only covers the short space of the four years from 1926 to 1930, interesting changes have taken place in the relative importance of the industries based on materials from the different origins. Since the purpose of such a comparison is to discover the relative importance of the manufacturing work done upon materials from the different origins, the figures of net value of products or the value added to the raw materials by the manufacturing processes will give a more accurate measure of the importance of the industrial groups than the figures of gross value of products.

The values added in the manufacture of materials of mineral origin in 1930 represented 34·5 p.c. of the total value added by manufacture in all industries. This is an increase of 1·5 p.c. since 1926. The second largest group from the point of view of value added is that of farm origin which accounted for 28·5 p.c. of the total value added in 1930. This group remained practically stationary, having increased only 0·1 p.c. since 1926. The central electric stations group also bettered its position as compared with 1926, the percentages of the totals being 5·9 in 1926 and 7·1 in 1930. On the other hand, the values added by the industries of the forest group declined from 22·6 p.c. of the total in 1926 to 20·4 p.c. in 1930. The increase during the period under review in the relative importance of the industries of the mineral group was probably due to a number of influences. The expansion of the motor vehicle industry, the rapid growth in the use of electrical equipment, increasing activity in construction which absorbed large quantities of steel, cement and various other manufactured mineral products, and the development of metallurgical plants in Canada were some factors in the growing importance of the mineral group of industries. Another factor in this trend has been the growing appreciation and development of the wealth of the mineral resources of Canada. Not only have the various mining activities made the raw materials for mineral industries more readily available, but those activities have also required large quantities of machinery, electrical apparatus and other finished products of mineral origin.

In the year 1930, the industries of the mineral group exceeded those of any other group in the net value of products with 34·5 p.c. of the total, as compared with 28·5 p.c. for the farm and 20·4 p.c. for the forest origin groups. These three principal groups stood in the same order of importance with regard to employees engaged and salaries and wages paid. In the matter of capital invested the mineral group also led with 30·7 p.c. of the total, followed by the forest group with 23·2 p.c., central electric stations with 21·9 p.c., and the farm group with 18·6 p.c.

9.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, 1926-30.

Origin.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
1926.	No.	$	No.	$	$	$	$
Totals	**22,708**	**3,981,569,590**	**581,539**	**653,850,933**	**1,728,624,192**	**1,492,645,039**	**3,221,269,231**
Farm origin—							
(a) From field crops	4,697	565,932,312	99,200	95,403,666	486,522,508	286,500,720	773,023,228
Canadian origin	4,434	323,033,863	56,017	54,719,806	299,452,868	187,256,154	486,709,022
Foreign origin	263	242,898,449	43,183	40,683,860	187,069,640	99,244,566	286,314,206
(b) From animal husbandry	4,149	258,779,323	68,362	71,675,146	334,243,258	138,517,721	475,760,979
Canadian origin	4,137	248,759,804	65,939	69,690,146	333,770,293	133,483,533	467,253,826
Foreign origin	12	10,019,519	2,423	1,985,000	3,472,965	5,034,188	8,507,153
(c) **Totals, Farm Origin**	**8,846**	**824,711,635**	**167,562**	**167,078,812**	**823,765,766**	**425,018,441**	**1,248,784,207**
Canadian origin	8,571	571,793,667	121,956	124,409,952	633,223,161	320,739,687	953,962,848
Foreign origin	275	252,917,968	45,606	42,668,860	190,542,605	104,278,754	294,821,359
Wild life origin	232	13,321,668	3,662	4,328,731	12,459,350	9,316,338	21,775,688
Marine origin	831	28,868,071	17,408	5,622,837	22,034,129	14,156,635	36,190,764
Forest origin	6,710	926,726,166	133,428	159,969.652	260,039,864	337,511,793	597,551,657
Mineral origin	3,284	1,200,704,022	173,515	226,802,705	489,898,292	492,204,727	982.103,019
Mixed origin	1,748	231,017,962	72,558	70,105,196	120,426,791	125,503,372	245,930,163
Central electric stations	1,057	756,220,066	13,406	19,943,000	-	88,933,733	88,933,733
1927.							
Totals	**22,936**	**4,337,631,558**	**618,933**	**693,932,228**	**1,758,789,334**	**1,635,923,936**	**3,394,713,270**
Farm origin—							
(a) From field crops	4,977	613,855,706	104,850	103,990,849	495,122,606	332,027,953	827,150,559
Canadian origin	4,683	358,813,700	58,484	58,483,142	312,675,963	215,539,287	528,215,250
Foreign origin	294	255,042,006	46,366	45,507,707	182,446,643	116,488,666	298,935,309

9.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, 1926-30—continued.

Origin.	Establishments.	Capital.	Employees.	Salaries and Wages	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1927.—concluded.							
(b) From animal husbandry.........	4,007	283,449,879	70,131	73,587,671	336,059,831	151,765,691	487,825,522
Canadian origin..	3,993	261,122,061	67,241	71,247,700	332,043,200	146,211,405	478,254,605
Foreign origin....	14	22,327,818	2,890	2,339,971	4,016,631	5,554,286	9,570,917
(c) **Totals, Farm Origin**.........	**8,984**	**897,305,585**	**174,981**	**177,578,520**	**831,182,437**	**483,793,644**	**1,314,976,081**
Canadian origin..	8,676	619,935,761	125,725	129,730,842	644,719,163	361,750,692	1,006,469,855
Foreign origin....	308	277,369,824	49,256	47,847,678	186,463,274	122,042,952	308,506,226
Wild life origin.........	244	14,489,527	3,880	4,588,689	13,462,752	9,413,528	22,876,280
Marine origin...........	773	24,454,482	16,697	5,373,951	18,364,846	12,719,763	31,084,609
Forest origin...........	6,770	1,020,144,236	149,738	166,921,448	270,764,265	355,741,746	626,506,011
Mineral origin..........	3,232	1,268,521,442	180,365	239,692,970	497,368,048	528,034,653	1,025,402,701
Mixed origin............	1,836	245,891,001	78,564	76,830,335	127,646,986	142,187,305	269,834,291
Central electric stations	1,097	866,825,285	14,708	22,946,315	-	104,033,297	104,033,297
1928.							
Totals................	**23,379**	**4,780,296,049**	**658,023**	**755,199,372**	**1,919,438,703**	**1,819,046,025**	**3,738,484,728**
Farm origin—							
(a) From field crops.	5,035	654,648,894	110,502	110,960,496	513,481,501	363,530,939	877,012,440
Canadian origin..	4,740	398,072,152	62,843	63,285,079	331,757,735	247,558,176	579,315,911
Foreign origin....	295	256,576,742	47,659	47,675,417	181,723,766	115,972,763	297,696,529
(b) From animal husbandry.........	3,946	296,631,572	72,592	76,208,206	365,750,609	153,788,029	519,538,638
Canadian origin..	3,930	270,471,869	68,659	72,766,657	361,111,892	147,529,473	508,641,365
Foreign origin....	16	26,159,703	3,933	3,441,549	4,638,717	6,258,556	10,897,273
(c) **Totals, Farm Origin**.........	**8,981**	**951,280,466**	**183,094**	**187,168,702**	**879,232,110**	**517,318,968**	**1,396,551,078**
Canadian origin..	8,670	668,544,021	131,502	136,051,736	692,869,627	395,087,649	1,087,957,276
Foreign origin....	311	282,736,445	51,592	51,116,966	186,362,483	122,231,319	308,593,802
Wild life origin.........	237	14,934,287	3,810	4,692,505	14,127,017	9,150,348	23,277,365
Marine origin...........	713	26,941,283	15,434	5,261,096	20,578,767	15,688,965	36,267,732
Forest origin...........	7,241	1,155,561,945	157,153	178,151,066	292,149,341	387,224,205	679,373,546
Mineral origin..........	3,256	1,411,098,815	198,676	272,345,046	574,473,014	620,502,715	1,194,975,729
Mixed origin............	1,902	263,559,650	84,001	83,493,537	138,878,454	156,834,005	295,712,459
Central electric stations	1,049	956,919,603	15,855	24,087,420	-	112,326,819	112,326,819
1929.							
Totals................	**23,597**	**5,083,014,754**	**694,434**	**813,049,842**	**2,032,020,975**	**1,997,350,365**	**4,029,371,340**
Farm origin—							
(a) From field crops.	5,191	697,206,163	114,236	115,201,292	496,842,580	392,232,666	889,075,246
Canadian origin..	4,893	436,282,846	67,234	67,235,530	326,292,523	272,019,338	598,311,861
Foreign origin....	298	260,923,317	47,002	47,965,762	170,550,057	120,213,328	290,763,385
(b) From animal husbandry.........	3,873	300,457,360	71,818	76,931,259	361,854,627	160,315,776	522,170,403
Canadian origin..	3,850	272,178,703	67,446	73,105,463	355,763,503	151,930,820	507,694,323
Foreign origin....	23	28,278,657	4,372	3,825,796	6,091,124	8,384,956	14,476,080
(c) **Totals, Farm Origin**.........	**9,064**	**997,663,523**	**186,054**	**192,132,551**	**858,697,207**	**552,548,442**	**1,411,245,649**
Canadian origin..	8,743	708,461,549	134,680	140,340,993	682,056,026	423,950,158	1,106,006,184
Foreign origin....	321	289,201,974	51,374	51,791,558	176,641,181	128,598,284	305,239,465
Wild life origin.........	234	14,338,686	3,767	4,783,323	12,847,817	8,013,222	20,861,039
Marine origin...........	730	28,644,442	16,367	5,411,855	21,496,859	13,469,401	34,966,260
Forest origin...........	7,353	1,148,558,242	163,863	191,044,307	313,088,964	409,180,102	722,269,066
Mineral origin..........	3,219	1,550,662,908	218,879	304,027,803	678,683,203	713,816,665	1,392,499,868
Mixed origin............	1,973	287,415,421	89,340	90,818,182	147,206,925	177,439,087	324,646,012
Central electric stations	1,024	1,055,736,532	16,164	24,831,821	-	122,883,446	122,883,446
1930.							
Totals................	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
Farm origin—							
(a) From field crops.	5,227	677,792,694	105,192	102,726,935	405,562,922	346,124,426	751,687,348
Canadian origin..	4,935	442,807,092	65,376	63,794,721	279,881,769	250,225,715	530,107,484
Foreign origin....	292	234,985,602	40,216	38,932,214	125,681,153	95,898,711	221,579,864
(b) From animal husbandry.........	3,749	288,981,837	67,601	70,062,906	297,742,312	155,591,217	453,333,529
Canadian origin..	3,724	258,475.777	62,208	65,344,316	290,108,983	145,415,948	435,524,931
Foreign origin....	25	30,506,060	5,393	4,718,590	7,633,329	10,175,269	17,808,598

9.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, 1926-30—concluded.

Origin.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.	Gross Value of Products.
	No.	$	No.	$	$	$	$
1930.—concluded.							
(c) **Totals, Farm Origin**.........	**8,976**	**966,774,531**	**173,193**	**172,789,841**	**703,305,234**	**501,715,643**	**1,205,020,877**
Canadian origin..	8,659	701,282,869	127,584	129,139,037	569,990,752	395,641,663	965,632,415
Foreign origin....	317	265,491,662	45,609	43,650,804	133,314,482	106,073,980	239,388,462
Wild life origin.........	226	12,807,807	3,437	4,272,725	9,753,282	7,606,310	17,359,592
Marine origin...........	699	30,827,607	10,558	4,302,854	21,081,489	11,891,819	32,973,308
Forest origin...........	7,713	1,208,835,180	153,295	168,769,271	265,842,844	359,708,400	625,551,244
Mineral origin..........	3,400	1,596,294,958	205,035	280,642,536	547,099,544	608,097,983	1,155,197,527
Mixed origin............	1,972	249,576,661	81,063	78,028,096	119,901,509	146,928,426	266,829,935
Central electric stations	1,034	1,138,200,016	17,858	27,287,443	–	126,038,145	126,038,145

Subsection 4.—The Forty Leading Manufacturing Industries.

There has been little change from 1929 in the order of the ten leading industries arranged by gross production although there has been an appreciable decrease in the value of production in nearly every case. In 1930 pulp and paper was again in the lead, followed by slaughtering and meat-packing, and flour and grist-mill products, as in 1929, but central electric stations, which in the earlier year ranked fifth, was in fourth place in 1930. The automobile industry fell from fourth place in 1929 to ninth place in 1930 with a reduction of nearly 43 p.c. in the value of gross production. The electrical apparatus and supplies industry improved its position slightly.

On the basis of net value, or value added by manufacture, the order of importance of the industries in 1930 was very different from that based on gross values. The pulp and paper industry was foremost in this respect also, but it was followed by: central electric stations; electrical apparatus; tobacco, cigars and cigarettes; printing and publishing; and non-ferrous metal smelting in the order given. In salaries and wages paid the pulp and paper industry is followed by: railway rolling stock, sawmills, central electric stations, printing and publishing, and electrical apparatus, in the order named. Tables **10, 11** and **12** which follow show the forty leading industries for 1930 classified according to gross value of the products, the net value of products, and salaries and wages paid.

10.—Principal Statistics of Forty Leading Industries, Classified According to the Gross Value of the Products, 1930.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Values of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
1	Pulp and paper......	109	714,437,104	33,207	45,774,976	81,992,255	133,681,991	215,674,246
2	Slaughtering and meat-packing......	76	60,778,996	9,290	12,114,667	129,004,327	35,025,626	164,029,953
3	Flour and grist-mill products..........	1,277	62,617,007	5,923	6,679,113	119,677,686	25,178,260	144,855,946
4	Central electric stations..............	1,034	1,138,200,016	17,858	27,287,443	–	126,038,145	126,038,145
5	Sawmills............	3,531	181,116,933	43,457	28,512,901	72,956,762	48,186,223	121,142,985
6	Butter and cheese...	2,698	50,502,406	11,980	13,071,916	80,559,841	32,458,948	113,018,789
7	Railway rolling stock	37	95,785,640	25,952	37,625,050	60,289,445	44,633,256	104,922,701
8	Electrical apparatus and supplies.......	149	102,979,896	20,568	26,260,004	43,111,629	61,466,161	104,577,790
9	Automobiles.........	16	90,671,678	12,541	19,473,782	66,924,019	34,753,468	101,677,487
10	Non-ferrous metal smelting and refining................	14	175,010,686	8,626	13,796,124	45,310,472	55,635,664	100,946,136

10.—Principal Statistics of Forty Leading Industries, Classified According to the Gross Value of the Products, 1930.—concluded.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Values of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
11	Petroleum products..	28	70,334,381	5,134	8,190,130	71,800,429	19,986,776	91,787,205
12	Tobacco, cigars and cigarettes..........	103	51,376,115	8,905	7,837,711	24,286,734	61,385,052	85,671,786
13	Castings and forgings	340	100,318,189	20,499	25,871,261	28,262,602	45,971,069	74,233,671
14	Rubber goods, including footwear...	47	69,164,512	15,163	15,895,479	28,821,759	44,930,914	73,752,673
15	Bread and other bakery products.......	2,697	51,914,170	17,736	19,444,533	36,582,843	37,012,051	73,594,894
16	Printing and publishing................	776	66,860,624	17,063	26,937,052	15,993,916	56,019,255	72,013,171
17	Clothing, women's factory............	455	23,432,441	16,782	16,483,011	35,759,351	26,056,597	61,815,948
18	Biscuits, confectionery, chocolate, etc.	280	54,406,093	12,291	11,104,668	25,044,901	33,014,701	58,059,602
19	Breweries...........	73	67,637,142	4,642	6,756,634	16,534,273	40,986,816	57,521,089
20	Hosiery, knitted goods and gloves..	167	65,047,351	18,570	15,057,147	25,509,913	28,608,011	54,117,924
21	Machinery...........	174	69,454,103	11,044	15,089,887	18,326,621	35,422,861	53,749,482
22	Primary iron and steel...............	49	112,079,926	9,723	14,934,325	22,765,648	29,823,287	52,588,935
23	Cotton yarn and cloth..............	33	78,542,804	16,999	13,004,793	27,975,574	20,717,304	48,692,878
24	Sheet metal products	155	53,368,130	8,728	10,452,887	25,090,342	21,977,137	47,067,479
25	Sugar refineries......	8	43,855,155	2,281	3,560,260	30,610,701	12,325,021	42,935,722
26	Clothing, men's factory...............	192	26,294,787	10,836	11,542,990	21,533,514	19,285,909	40,819,423
27	Boots and shoes, leather............	179	28,162,582	13,922	12,858,062	20,521,726	19,957,185	40,478,911
28	Printing and bookbinding...........	905	38,837,176	11,567	15,663,048	11,942,885	25,998,902	37,941,787
29	Furniture and upholstering............	366	41,495,827	11,980	12,774,596	13,817,450	23,048,745	36,866,195
30	Coke and gas products...............	41	89,987,235	3,970	5,864,802	17,082,364	19,510,495	36,592,859
31	Planing mills, sash and door factories.	728	49,333,121	9,651	10,981,763	19,220,215	17,263,379	36,483,594
32	Fish curing and packing................	699	30,827,607	10,558	4,302,854	21,081,489	11,891,819	32,973,308
33	Fruit and vegetable canning, preserving, etc............	249	35,119,475	9,137	4,155,595	19,816,763	11,641,652	31,458,415
34	Agricultural implements.............	57	98,684,828	7,405	9,564,049	11,353,523	15,548,616	26,902,139
35	Bridge and structural steel work.........	13	28,922,951	4,943	8,686,062	12,549,435	13,506,348	26,055,783
36	Dyeing, cleaning and laundry work......	387	28,351,092	12,732	12,141,767	2,807,911	22,664,753	25,472,664
37	Brass and copper products..............	117	26,820,527	5,297	6,742,752	13,355,186	12,057,039	25,412,225
[illegible]	Furnishing goods, men's.............	158	17,597,012	8,965	6,437,718	14,790,909	10,363,401	25,154,310
39	Distilleries..........	15	61,533,825	1,965	2,435,934	6,616,520	18,309,341	24,925,861
40	Paints, pigments and varnishes..........	78	26,212,828	2,835	4,307,998	11,094,435	12,872,067	23,966,502
	Totals, Forty Leading Industries....	**18,510**	**4,278,072,371**	**500,725**	**569,675,744**	**1,350,776,368**	**1,365,214,245**	**2,715,990,613**
	Grand Totals, All Industries........	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
	Percentages of forty leading industries to all industries....	77·06	82·22	77·70	77·39	81·03	77·48	79·21

11.—Principal Statistics of Forty Leading Industries, Classified According to the Net Value of the Products, 1930.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Values of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
1	Pulp and paper	109	714,437,104	33,207	45,774,976	81,992,255	133,681,991	215,674,246
2	Central electric stations	1,034	1,138,200,016	17,858	27,287,443	-	126,038,145	126,038,145
3	Electrical apparatus and supplies	149	102,979,896	20,568	26,260,004	43,111,629	61,466,161	104,577,790
4	Tobacco, cigars and cigarettes	103	51,376,115	8,905	7,837,711	24,286,734	61,385,052	85,671,786
5	Printing and publishing	776	66,860,624	17,063	26,937,052	15,993,916	56,019,255	72,013,171
6	Non-ferrous metal smelting and refining	14	175,010,686	8,626	13,796,124	45,310,472	55,635,664	100,946,136
7	Sawmills	3,531	181,116,933	43,457	28,512,901	72,956,762	48,186,223	121,142,985
8	Castings and forgings	340	100,318,189	20,499	25,871,261	28,262,602	45,971,069	74,233,671
9	Rubber goods, including footwear	47	69,164,512	15,163	15,895,479	28,821,759	44,930,914	73,752,673
10	Railway rolling stock	37	95,785,640	25,952	37,625,050	60,289,445	44,633,256	104,922,701
11	Breweries	73	67,637,142	4,642	6,756,634	16,534,273	40,986,816	57,521,089
12	Bread and other bakery products	2,697	51,914,170	17,736	19,444,533	36,582,843	37,012,051	73,594,894
13	Machinery	174	69,454,103	11,044	15,089,887	18,326,621	35,422,861	53,749,482
14	Slaughtering and meat-packing	76	60,778,996	9,290	12,114,667	129,004,327	35,025,626	164,029,953
15	Automobiles	16	90,671,678	12,541	19,473,782	66,924,019	34,753,468	101,677,487
16	Biscuits, confectionery, chocolate, etc.	280	54,406,093	12,291	11,104,668	25,044,901	33,014,701	58,059,602
17	Butter and cheese	2,698	50,502,406	11,980	13,071,916	80,559,841	32,458,948	113,018,789
18	Primary iron and steel	49	112,079,926	9,723	14,934,325	22,765,648	29,823,287	52,588,935
19	Hosiery, knitted goods and gloves	167	65,047,351	18,570	15,057,147	25,509,913	28,608,011	54,117,924
20	Clothing, women's factory	455	23,432,441	16,782	16,483,011	35,759,351	26,056,597	61,815,948
21	Printing and bookbinding	905	38,837,176	11,567	15,663,048	11,942,885	25,998,902	37,941,787
22	Furniture	366	41,495,827	11,980	12,774,596	13,817,450	23,048,745	36,866,195
23	Dyeing, cleaning and laundry work	387	28,351,092	12,732	12,141,767	2,807,911	22,664,753	25,472,664
24	Sheet metal products	155	53,368,130	8,728	10,452,887	25,090,342	21,977,137	47,067,479
25	Flour and grist-mill products	1,277	62,617,007	5,923	6,679,113	119,677,686	25,178,260	144,855,946
26	Cotton yarn and cloth	33	78,542,804	16,999	13,004,793	27,975,574	20,717,304	48,692,878
27	Petroleum products	28	70,334,381	5,134	8,190,130	71,800,429	19,986,776	91,787,205
28	Boots and shoes, leather	179	28,162,582	13,922	12,858,062	20,521,726	19,957,185	40,478,911
29	Coke and gas products	41	89,987,235	3,970	5,864,802	17,082,364	19,510,495	36,592,859
30	Clothing, factory, men's	192	26,294,787	10,836	11,542,990	21,533,514	19,285,909	40,819,423
31	Distilleries	15	61,533,825	1,965	2,435,934	6,616,520	18,309,341	24,925,861
32	Cement	11	59,210,737	2,317	3,172,198	-	17,713,067	17,713,067
33	Planing mills, sash and door factories, etc.	728	49,333,121	9,651	10,981,763	19,220,215	17,263,379	36,483,594
34	Agricultural implements	57	98,684,828	7,405	9,564,049	11,353,523	15,548,616	26,902,139
35	Acids, alkalies and salts	17	52,314,567	2,409	3,502,834	4,712,471	15,399,131	20,111,602
36	Hardware and tools	133	32,259,387	6,220	6,717,192	6,713,290	14,760,865	21,474,155
37	Bridge and structural steel work	13	28,922,951	4,943	8,686,062	12,549,435	13,506,348	26,055,783
38	Paints, pigments and varnishes	78	26,212,828	2,835	4,307,998	11,094,435	12,872,067	23,966,502
39	Sugar refineries	8	43,855,155	2,281	3,560,260	30,610,701	12,325,021	42,935,722
40	Medicinal and pharmaceutical preparations	144	18,843,192	2,833	3,663,307	5,563,081	12,205,725	17,768,806
	Totals	**17,592**	**4,330,335,633**	**480,547**	**565,092,356**	**1,298,720,863**	**1,379,339,122**	**2,678,059,985**
	Grand Totals, All Industries	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
	Percentages of forty leading industries to all industries	73·2	83·2	74·6	76·8	77·9	78·3	78·1

12.—Principal Statistics of Forty Leading Industries, Classified According to Salaries and Wages Paid, 1930.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Values of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
1	Pulp and paper.......	109	714,437,104	33,207	45,774,976	81,992,255	133,681,991	215,674,246
2	Railway rolling stock	37	95,785,640	25,952	37,625,050	60,289,445	44,633,256	104,922,701
3	Sawmills............	3,531	181,116,933	43,457	28,512,901	72,956,762	48,186,223	121,142,985
4	Central electric stations..............	1,034	1,138,200,016	17,858	27,287,443	–	126,038,145	126,038,145
5	Printing and publishing................	776	66,860,624	17,063	26,937,052	15,993,916	56,019,255	72,013,171
6	Electrical apparatus and supplies.......	149	102,979,896	20,568	26,260,004	43,111,629	61,466,161	104,577,790
7	Castings and forgings	340	100,318,189	20,499	25,871,261	28,262,602	45,971,069	74,233,671
8	Automobiles.........	16	90,671,678	12,541	19,473,782	66,924,019	34,753,468	101,677,487
9	Bread and other bakery products.......	2,697	51,914,170	17,736	19,444,533	36,582,843	37,012,051	73,594,894
10	Clothing, factory, women's.........	455	23,432,441	16,782	16,483,011	35,759,351	26,056,597	61,815,948
11	Rubber goods including foot-wear....	47	69,164,512	15,163	15,895,479	28,821,759	44,930,914	73,752,673
12	Printing and bookbinding............	905	38,837,176	11,567	15,663,048	11,942,885	25,998,902	37,941,787
13	Machinery...........	174	69,454,103	11,044	15,089,887	18,326,621	35,422,861	53,749,482
14	Hosiery, knitted goods and gloves..	167	65,047,351	18,570	15,057,147	25,509,913	28,608,011	54,117,924
15	Primary iron and steel..............	49	112,079,926	9,723	14,934,325	22,765,648	29,823,287	52,588,935
16	Non-ferrous metal smelting and refining.............	14	175,010,686	8,626	13,796,124	45,310,472	55,635,664	100,946,136
17	Butter and cheese...	2,698	50,502,406	11,980	13,071,916	80,559,841	32,458,948	113,018,789
18	Cotton yarn and cloth	33	78,542,804	16,999	13,004,793	27,975,574	20,717,304	48,692,878
19	Boots and shoes, leather............	179	28,162,582	13,922	12,858,062	20,521,726	19,957,185	40,478,911
20	Furniture............	366	41,495,827	11,980	12,774,596	13,817,450	23,048,745	36,866,195
21	Dyeing, cleaning and laundry work......	387	28,351,092	12,732	12,141,767	2,807,911	22,664,753	25,472,664
22	Slaughtering and meat packing......	76	60,778,996	9,290	12,114,667	129,004,327	35,025,626	164,029,953
23	Clothing, factory, men's............	192	26,294,787	10,836	11,542,990	21,533,514	19,285,909	40,819,423
24	Biscuits, confectionery, chocolate, etc.	280	54,406,093	12,291	11,104,668	25,044,901	33,014,701	58,059,602
25	Planing mills, sash & door factories, etc.	728	49,333,121	9,651	10,981,763	19,220,215	17,263,379	36,483,594
26	Sheet metal products	155	53,368,130	8,728	10,452,887	25,090,342	21,977,137	47,067,479
27	Agricultural implements............	57	98,684,828	7,405	9,564,049	11,353,523	15,548,616	26,902,139
28	Bridge and structural steel work.........	13	28,922,951	4,943	8,686,062	12,549,435	13,506,348	26,055,783
29	Petroleum products..	28	70,334,381	5,134	8,190,130	71,800,429	19,986,776	91,787,205
30	Tobacco, cigars and cigarettes..........	103	51,376,115	8,905	7,837,711	24,286,734	61,385,052	85,671,786
31	Shipbuilding and repairs..............	43	31,597,501	5,139	7,145,593	5,060,973	11,808,949	16,869,922
32	Breweries...........	73	67,637,142	4,642	6,756,634	16,534,273	40,986,816	57,521,089
33	Brass and copper products..............	117	26,820,527	5,297	6,742,752	13,355,186	12,057,039	25,412,225
34	Hardware and tools.	133	32,259,387	6,220	6,717,192	6,713,290	14,760,865	21,474,155
35	Furnishing goods, men's.............	158	17,597,012	8,965	6,437,718	14,790,909	10,363,401	25,154,310
36	Flour and grist-mill products..........	1,277	62,617,007	5,923	6,679.113	119,677.686	25,178,260	144,855,946
37	Coke and gas products..............	41	89,987,235	3,970	5,864,802	17,082,364	19,510,495	36,592,859
38	Engraving, stereotyping and electrotyping.............	76	9,806,326	2,807	5,025,485	1,456,175	7,272,564	8,728,739
39	Clay products from domestic clay.....	203	33,430,777	5,026	4,961,130	–	10,593,578	10,593,578
40	Boxes and bags of paper..............	126	21,667,586	5,062	4,921,735	10,451,641	10,384,509	20,836,150
	Totals..............	**18,012**	**4,209,285,058**	**498,203**	**579,684,238**	**1,285,238,539**	**1,352,994,810**	**2,638,233,349**
	Grand Totals, All Industries.......	**24,020**	**5,203,316,760**	**644,439**	**736,092,766**	**1,666,983,902**	**1,761,986,726**	**3,428,970,628**
	Percentages of forty leading industries to all industries....	75·1	80·9	77·3	78·8	77·1	76·8	76·9

The Forty Leading Industries in 1931.—The completion of part of the compilation of the Census of Manufactures for 1931 permits the inclusion, as Table **12A** of the forty leading industries in that year. It will be noticed that, compared with 1930, there has been a considerable readjustment in the order of the ten leading industries when arranged according to gross production, although there has been an appreciable decrease in the value of production in nearly every case; in the former year they all had gross productions of over $100,000,000, whereas in 1931 only the three leading industries had gross productions exceeding this figure. In 1932 pulp and paper was again in the lead, followed by central electric stations, slaughtering and meat packing, non-ferrous metal smelting, and flour and feed mills, which in 1930 were in fourth, second, tenth and third places, respectively. The automobile industry fell from ninth place in 1930 to fourteenth place in 1931 with a reduction of over 41 p.c. in the value of gross production.

On the basis of net values, or value added by manufacture, the order of importance of the industries in 1931 was very different from that based on gross value. The central electric station industry was foremost in this respect, followed by pulp and paper; tobacco, cigars and cigarettes; printing and publishing ; non-ferrous metal smelting; and electrical apparatus and supplies. In salaries and wages paid, the pulp and paper industry is decidedly in the lead, being followed by railway rolling stock; printing and publishing; central electric stations; electrical apparatus and supplies; and castings and forgings, in the order given. Contrary to the general impression the central electric stations industry, which is first in net value of production—its cost of materials being negligible—ranks high in salaries and wages paid, being fourth in 1930 and third in 1931 in this respect.

12A.—Principal Statistics of the Forty Leading Industries, Classified According to the Gross Value of Products, 1931.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Values of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
1	Pulp and paper	103	630,176,540	26,669	34,792,013	63,947,678	110,786,276	174,733,954
2	Central electric stations	1,011	1,229,988,951	17,014	26,306,956	–	122,310,730	122,310,730
3	Slaughtering and meat packing	147	62,481,905	9,294	11,626,678	91,276,842	26,319,855	117,596,697
4	Non-ferrous metal smelting	14	175,669,195	7,860	13,245,327	48,336,301	50,229,454	98,565,755
5	Flour and feed mills	1,265	61,069,192	5,671	6,032,189	71,771,797	23,956,743	95,728,540
6	Butter and cheese	2,676	52,381,144	11,965	12,259,926	64,661,837	31,066,561	95,728,398
7	Electrical apparatus and supplies	163	100,057,945	18,207	22,474,319	32,385,342	49,193,253	81,578,595
8	Petroleum products	32	68,136,281	4,122	6,214,745	50,617,742	25,540,902	76,158,644
9	Tobacco, cigars and cigarettes	105	50,194,202	9,091	8,096,769	21,448,879	53,477,275	74,926,154
10	Railway rolling stock	38	97,484,985	21,773	28,111,765	35,335,573	32,529,497	67,865,070
11	Printing and publishing	764	65,573,014	16,918	26,375,663	14,029,548	51,670,574	65,700,122
12	Bread and other bakery products	2,912	54,267,110	18,337	18,862,604	28,619,776	36,198,451	64,818,227
13	Sawmills	3,562	121,336,176	22,361	16,409,674	37,379,034	25,390,219	62,769,253
14	Automobiles	26	59,638,057	9,545	13,113,192	36,476,355	23,197,990	59,674,345
15	Clothing, factory, women's	471	21,430,983	15,648	15,018,195	30,955,973	23,184,797	54,140,770
16	Rubber goods, including footwear	48	67,446,955	12,158	11,708,387	17,630,081	35,061,149	52,691,230

12A.—Principal Statistics of the Forty Leading Industries, Classified According to the Gross Value of Products, 1931—concluded.

No.	Industry.	Establishments.	Capital.	Employees	Salaries and Wages.	Cost of Materials.	Values of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
17	Castings and forgings..............	333	95,377,318	17,049	19,203,234	18,598,048	32,857,248	51,455,296
18	Biscuits, confectionery, chocolate, etc.	282	51,530,443	12,145	10,892,636	20,207,678	29,077,364	49,285,042
19	Breweries...........	80	63,140,211	4,679	6,601,528	13,289,689	35,766,050	49,055,739
20	Hosiery and knitted goods.............	161	57,173,774	17,698	13,948,570	22,052,418	25,705,285	47,757,703
21	Sugar refineries......	8	37,691,433	2,265	3,307,730	29,196,494	14,765,567	43,962,061
22	Cotton yarn and cloth...............	34	74,023,179	15,802	12,362,032	22,231,449	20,904,974	43,136,423
23	Sheet metal products	157	52,352,956	7,988	9,265,806	20,230,852	18,808,153	39,039,005
24	Primary iron and steel...............	53	104,512,104	8,026	11,072,054	15,291,414	21,619,831	36,911,245
25	Boots and shoes.....	184	25,844,168	14,150	12,340,283	17,949,804	18,675,761	36,625,565
26	Machinery...........	172	62,752,673	8,644	10,793,352	11,120,332	23,372,583	34,492,915
27	Clothing, factory, men's.............	180	21,599,392	9,701	9,585,462	18,362,813	15,587,270	33,950,083
28	Fruit and vegetable preparations.......	278	48,152,325	6,329	4,509,377	18,668,100	13,904,480	32,572,580
29	Printing and bookbinding............	971	36,832,215	11,189	14,604,194	10,250,998	22,287,630	32,538,628
30	Coke and gas products...............	41	95,872,858	4,006	5,616,763	13,894,061	17,355,399	31,249,460
31	Furniture............	372	36,657,497	10,007	10,047,027	10,588,707	16,546,464	27,135,171
32	Planing mills, sash and door factories.	673	40,790,104	7,952	8,346,474	13,703,622	12,515,851	26,219,473
33	Bridge and structural steel work.........	21	27,469,351	4,421	7,143,544	9,132,721	13,037,494	22,170,215
34	Coffee, tea and spices	59	13,500,659	1,639	2,251,103	14,384,811	7,602,446	21,987,257
35	Dyeing, cleaning and laundry work......	407	25,621,564	11,772	10,671,615	1,968,029	19,056,655	21,024,684
36	Furnishing goods, men's.............	167	16,649,101	8,139	5,787,221	11,534,873	9,443,605	20,978,478
37	Fish-curing and packing................	662	19,085,513	4,268	2,761,423	11,920,834	6,906,059	18,826,893
38	Boxes and bags,paper	122	21,562,581	4,809	4,924,682	9,627,461	9,041,102	18,668,563
39	Paints, pigments and varnishes..........	75	24,985,476	2,780	4,281,861	7,974,852	10,561,611	18,536,463
40	Silk and artificial silk................	23	32,205,207	6,273	5,758,995	6,482,197	11,705,295	18,187,492
	Totals, Forty Leading Industries....	**18,852**	**4,002,714,737**	**428,364**	**476,725,368**	**993,535,015**	**1,147,217,903**	**2,140,752,918**
	Grand Totals, All Industries........	**24,501**	**4,961,312,408**	**557,426**	**624,545,561**	**1,223,880,011**	**1,474,581,851**	**2,698,461,862**
	Percentages of forty leading industries to all industries...	76·94	80·68	76·85	76·33	81·18	77·80	79·33

Section 3.—Provincial Distribution of Manufacturing Production.

Ontario and Quebec are the most important manufacturing provinces of Canada. Their combined production in 1930 amounted to $2,735,000,000, or nearly 80 p.c. of the gross value of manufactured products of the Dominion. Of this amount Ontario contributed $1,713,000,000 and Quebec $1,022,000,000. The proximity of Ontario to the coal fields of Pennsylvania, the water-power resources of the two provinces and their nearness to the larger markets of Canada and the United States have all contributed to the above result. British Columbia had, in 1930, the third largest gross manufacturing production, $241,000,000, and Manitoba the fourth, $142,000,000. Alberta, Nova Scotia, New Brunswick and Saskatchewan followed in that order with gross production from $94,315,000 to $62,277,000, succeeded by Prince Edward Island with $4,255,000.

Subsection 1.—The Manufactures of the Maritime Provinces, 1930.

Table **13** gives statistics of the leading industries of each of the Maritime Provinces for the year 1930. In Prince Edward Island the manufacture of butter and cheese, with a gross production in 1930 of $845,417, was foremost, followed by fish-curing and -packing, with a gross production of $831,585. Manufacturing in Nova Scotia and New Brunswick is, of course, to a considerable extent dominated by the steel industry in the former and the forest industries in the latter, although there is a large sugar refinery in each province. The pulp and paper industry with a gross value of production of $12,614,177 in 1930 was the most important industry in New Brunswick, followed by sawmills with an output valued at $8,564,415. These two industries combined provided 33·4 p.c. of the gross manufacturing production of the province. In Nova Scotia the primary iron and steel industry was dominant with an output valued at $11,814,234. Other leading industries in order of their importance being, fish-curing and -packing, pulp and paper, railway rolling stock, biscuits and confectionery, central electric stations, etc.

13.—Statistics of Ten Leading Industries of each of the Maritime Provinces, 1930.

Note.—Other leading industries, statistics of which cannot be given because there are fewer than three establishments in each industry, are: in Prince Edward Island, tobacco, cigars and cigarettes, slaughtering and meat-packing, and railway rolling stock; in Nova Scotia, petroleum, sugar refineries, coke and gas products; in New Brunswick, sugar refineries and railway rolling stock. The statistics for these industries are included in the grand totals.

PRINCE EDWARD ISLAND.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$.
1	Butter and cheese	37	288,186	116	83,108	639,024	845,417
2	Fish-curing and-packing	95	189,375	1,179	93,914	632,482	831,585
3	Central electric stations	12	802,711	48	52,325	–	227,177
4	Castings and forgings	3	367,644	71	65,000	84,324	222,495
5	Printing and publishing	4	259,272	100	88,530	28,209	204,970
6	Flour mills	15	82,135	17	9,988	157,509	203,036
7	Bread and other bakery products	6	86,365	31	26,446	95,258	178,642
8	Sawmills	53	140,716	86	16,046	79,367	129,578
	Totals, Eight Leading Industries	**225**	**2,216,404**	**1,648**	**435,357**	**1,716,173**	**2,842,900**
	Grand Totals, All Industries	**267**	**3,441,958**	**2,055**	**788,106**	**2,546,827**	**4,254,966**

13.—Statistics of Ten Leading Industries of each of the Maritime Provinces, 1930—concluded.

NOVA SCOTIA.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$
1	Primary iron and steel industries	6	21,508,717	1,974	2,572,564	5,702,836	11,814,234
2	Fish-curing and-packing	228	3,901,261	3,856	1,235,088	5,148,628	7,602,659
3	Pulp and paper	6	14,592,397	721	1,103,799	1,699,777	4,893,891
4	Railway rolling stock	3	6,527,091	578	643,343	3,344,709	4,770,666
5	Biscuits, confectionery, chocolate, etc	11	4,978,322	1,098	1,111,193	1,508,800	3,808,639
6	Central electric stations	85	25,805,233	760	956,622	–	3,675,905
7	Sawmills	471	2,423,515	2,811	676,109	1,792,072	3,238,847
8	Butter and cheese	30	1,146,846	297	308,381	1,952,500	2,874,874
9	Printing and publishing	33	2,266,242	714	863,541	417,221	2,172,420
10	Hosiery, knitted goods and gloves	3	3,485,394	569	407,678	859,593	1,773,382
	Totals, Ten leading Industries	**876**	**86,635,018**	**13,378**	**9,878,318**	**22,426,136**	**46,625,517**
	Grand Totals, All Industries	**1,302**	**133,671,163**	**21,069**	**17,537,690**	**44,506,178**	**85,802,921**

NEW BRUNSWICK.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
1	Pulp and paper	7	49,789,447	2,469	2,869,262	5,505,007	12,614,177
2	Sawmills	308	21,252,028	4,619	2,222,118	5,672,218	8,564,415
3	Central electric stations	40	27,278,902	420	479,193	–	2,806,573
4	Fish-curing and-packing	162	1,882,479	1,960	306,377	1,642,854	2,688,014
5	Coffee and spices	5	1,659,985	144	172,820	2,065,377	2,404,545
6	Biscuits, confectionery, chocolate, etc	7	2,230,403	612	459,048	1,107,696	2,393,021
7	Cotton yarn and cloth	4	4,863,173	1,260	906,568	1,228,211	2,158,973
8	Slaughtering and meat packing	8	637,188	136	135,251	1,682,522	2,007,486
9	Butter and cheese	35	1,053,452	184	194,089	1,317,804	1,811,623
10	Castings and forgings	12	2,362,997	547	660,196	433,907	1,517,179
	Totals, Ten Leading Industries	**588**	**113,011,054**	**12,351**	**8,404,922**	**20,655,596**	**38,966,006**
	Grand Totals, All Industries	**924**	**140,611,530**	**18,422**	**14,988,441**	**33,897,264**	**63,468,262**

Subsection 2.—The Manufactures of Quebec, 1930.

The pulp and paper mills of Quebec, the most important manufacturing unit in the province, produced goods to the gross value of $109,241,510 in 1930. This exceeded by over $34,000,000 the gross value of products of the tobacco, cigar and cigarette industry ($75,056,846), which was followed by railway rolling stock works ($49,427,008) and the output of central electric stations ($43,201,265). These four industries were followed by sawmills, cotton yarn and cloth mills, women's factory clothing, non-ferrous metal smelting and refining, etc. A change took place in the ranking of some of the important industries of the province. The cotton yarn and cloth industry dropped from third place in 1929 to sixth place in 1930. This change was due to both the transfer of oilcloth and linoleum from this group to that of miscellaneous textiles, *n.e.s.* and a greatly reduced output. Other important changes were boots and shoes, which declined from eighth to thirteenth place and sawmills which advanced from tenth to fifth place.

The importance of the pulp and paper industry in Quebec is shown by a comparison with the industry throughout the Dominion. The Quebec industry, in addition to supplying about 11 p.c. of the total gross value of all products manufactured in the province, furnished nearly 51 p.c. of the products of pulp and paper mills throughout the country. The gross value of cotton yarn and cloth products from Quebec mills formed over 70 p.c., the gross value of cigars and cigarettes formed 88 p.c., the value of railway rolling stock 47 p.c., and the value of the boot and shoe products over 58 p.c. of the Dominion totals for these products. Thus Quebec is an outstanding manufacturing province rather on account of her great individual industries than because of the diversification of her industrial activities.

14.—Statistics of Forty Leading Industries of the Province of Quebec, 1930.

NOTE.—Leading industries having fewer than 3 establishments are sugar refineries and bridge-building.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$
1	Pulp and paper	48	363,928,749	16,552	21,802,615	40,667,838	109,241,510
2	Tobacco, cigars and cigarettes	64	45,174,352	7,873	6,712,190	21,463,425	75,056,846
3	Railway rolling stock	10	44,680,988	11,608	17,017,929	29,976,596	49,427,008
4	Central electric stations	136	445,381,055	4,444	6,541,919	–	43,201,265
5	Sawmills	1,334	55,534,068	12,177	5,463,460	23,084,564	34,349,164
6	Cotton yarn and cloth	14	53,871,463	11,195	8,475,201	20,400,009	34,321,573
7	Clothing, factory, women's	200	10,582,242	7,597	7,128,309	17,825,044	30,055,139
8	Non-ferrous metal smelting and refining	3	41,126,409	1,548	2,332,324	8,673,873	26,373,967
9	Clothing, factory, men's	126	14,912,591	6,169	6,239,583	13,736,751	25,934,858
10	Slaughtering and meat-packing	17	8,049,223	1,726	2,153,267	19,634,629	25,757,970
11	Butter and cheese	1,356	8,366,440	2,100	1,487,031	20,184,653	25,469,594
12	Electrical apparatus and supplies	19	33,075,054	6,857	9,207,818	11,398,604	24,860,747
13	Boots and shoes, leather	104	16,792,309	8,828	7,994,475	12,720,331	24,633,019
14	Flour and feed mills	350	9,652,851	1,002	1,075,183	19,417,434	22,626,864
15	Breweries	7	23,109,075	1,576	2,186,961	6,469,607	21,560,970
16	Bread and other bakery products	868	14,207,041	4,661	4,718,572	9,390,368	18,673,421
17	Castings and forgings	68	23,943,516	4,348	5,256,014	6,893,749	17,328,809
18	Printing and publishing	69	16,284,143	4,408	6,180,005	4,048,082	17,212,349
19	Rubber goods, including footwear	11	11,282,777	5,320	4,151,438	5,149,137	16,293,435
20	Petroleum products	6	15,215,501	962	1,627,834	12,476,338	15,853,065
21	Biscuits, confectionery, chocolate, etc	53	11,552,144	3,358	2,503,465	6,651,334	14,299,835
22	Distilleries	6	19,956,998	867	935,954	2,843,332	13,419,753
23	Machinery	27	20,647,298	3,534	4,714,267	5,015,464	13,343,827
24	Hosiery, knitted goods and gloves	41	15,793,682	4,586	3,353,623	6,954,344	13,335,532
25	Silk and silk goods	15	22,298,970	3,692	3,071,420	5,107,582	11,883,085
26	Furnishing goods, men's	71	7,303,636	4,282	2,690,150	6,470,190	11,079,241
27	Sheet metal products	19	10,725,590	2,042	2,368,341	5,368,137	10,136,720
28	Paints, pigments and varnishes	18	11,815,766	1,068	1,557,211	4,764,486	10,009,086
29	Printing and bookbinding	255	8,729,355	3,053	3,950,664	2,970,180	9,486,758
30	Shipbuilding and repairs	5	11,775,121	2,515	3,516,095	2,366,627	8,798,004
31	Planing mills, sash and door factories	282	10,848,509	2,394	2,515,567	4,483,861	8,427,583
32	Primary iron and steel	13	16,964,961	2,179	2,999,077	2,288,934	8,190,360
33	Dyeing, cleaning and laundry work	83	8,870,085	3,496	3,198,891	862,385	7,297,897
34	Hardware and tools	28	8,803,472	1,416	1,470,926	2,060,765	7,191,384
35	Miscellaneous textiles	5	9,529,843	903	1,215,262	3,162,663	7,079,052
36	Cement	3	22,998,094	901	1,245,624	–	7,031,528
37	Furniture	71	6,330,699	2,346	2,459,832	2,591,696	6,983,494
38	Hats and caps	65	2,680,081	1,924	1,902,332	3,276,379	6,644,072
39	Fur goods	70	5,675,486	1,296	1,629,567	3,890,762	6,547,660
40	Acids, alkalies and salts	3	17,979,898	871	1,182,581	2,051,495	6,541,202
	Totals, Forty Leading Industries	**5,943**	**1,506,449,535**	**167,674**	**176,312,977**	**376,791,648**	**845,957,646**
	Grand Totals, All Industries	**7,410**	**1,727,064,388**	**204,802**	**216,835,675**	**462,244,278**	**1,022,280,687**
	Percentages of forty leading industries to totals of all industries in the province	80·2	87·2	81·8	81·3	81·5	82·8

Subsection 3.—The Manufactures of Ontario, 1930.

Ontario is the most important manufacturing province of the Dominion. The gross value of its manufactured products in 1930 represented nearly 50 p.c. of those of the whole Dominion, while those of Quebec, the second province in importance in this respect, amounted to about 30 p.c. This premier position in manufacturing has been fairly uniformly maintained by Ontario over a long period, as the following percentages show: in 1926, 52 p.c.; 1920, 50 p.c.; 1918, 53 p.c.; 1910, 50 p.c.; 1900, 50 p.c.; 1890, 51 p.c. and 1880, 51 p.c. Thus, in spite of the rapid industrial development in recent years in other provinces such as Quebec, British Columbia and Manitoba, Ontario is maintaining a manufacturing production equal to that of the remainder of the Dominion.

The automobile manufacturing industry of Ontario in 1930 came first in the value of its products. This amounted to $96,668,671 as compared with $83,358,509 for the slaughtering and meat-packing industry which held second place. Other important industries in descending order, with the value of their products in 1930 were: electrical apparatus and supplies, $78,794,396; flour and grist mills, $75,700,205; pulp and paper, $68,036,733. Due to the general depression which prevailed in 1930, the five leading industries of Ontario, in common with many others, reported considerable decreases in the gross value of production, as compared with the previous year. The output of the automobile industry declined $69,000,000, flour and grist mills, $19,000,000, pulp and paper, $14,000,000, slaughtering and meat packing, $12,000,000, and electrical apparatus and supplies, $7,000,000.

Indicating the greater diversification of industry in Ontario as compared with Quebec, the percentages which the 40 leading industries bore to the total manufactures of the province were higher in nearly every particular in Quebec than in Ontario, especially in the capital employed and the number of establishments and employees. Outstanding among the industries in which the province of Ontario was pre-eminent was that of automobile manufacturing, which was carried on practically in this province alone. Other important industries in which Ontario led, with the percentage which the production of each bore to that of the Dominion in 1930, were as follows: agricultural implements, 96 p.c.; leather tanneries, 87 p.c.; rubber goods, 78 p.c.; furniture and upholstering, 75 p.c.; fruit and vegetable canning, preserving, etc., 67 p.c.; electrical apparatus and supplies, 75 p.c.; castings and forgings, 65 p.c.; primary iron and steel, 58 p.c.; slaughtering and meat-packing, 51 p.c.; flour and grist-mill products, 52 p.c.; hosiery, knitted goods, etc., 70 p.c.

15.—Statistics of Forty Leading Industries of the Province of Ontario, 1930.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$
1	Automobiles	10	84,852,592	11,654	18,075,826	62,982,941	96,668,671
2	Slaughtering and meat-packing	24	31,723,811	3,867	5,217,930	66,183,552	83,358,509
3	Electrical apparatus and supplies	107	69,079,394	13,481	16,761,615	31,318,218	78,794,396
4	Flour and grist mills	684	28,647,041	2,932	3,213,374	64,047,814	75,700,205
5	Pulp and paper	41	221,466,576	10,211	14,556,213	28,514,117	68,036,733
6	Rubber goods, including footwear	33	57,850,266	9,831	11,734,038	23,669,163	57,431,243
7	Butter and cheese	961	25,019,018	6,396	7,016,257	37,897,697	54,481,492
8	Central electric stations	430	440,872,470	7,362	12,138,712	....	49,371,901
9	Castings and forgings	194	62,421,734	13,155	16,508,913	18,543,309	48,353,160
10	Non-ferrous metal smelting and refining	7	71,403,415	3,714	5,915,756	19,889,887	47,735,612

15.—Statistics of Forty Leading Industries of the Province of Ontario, 1930–concluded.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$
11	Machinery	122	46,591,382	7,147	9,860,562	12,579,847	38,347,873
12	Hosiery, knitted goods and fabric gloves	110	44,176,748	12,940	10,929,930	17,036,327	37,634,490
13	Bread and other bakery products	1,071	23,334,067	8,568	9,774,795	17,185,996	35,161,217
14	Petroleum products	8	27,166,435	2,482	3,828,809	26,408,264	34,760,069
15	Printing and publishing	293	30,945,789	7,199	11,766,572	7,697,443	32,019,119
16	Biscuits, confectionery, cocoa, chocolate, etc	120	29,938,561	5,903	5,687,659	12,889,075	31,395,318
17	Primary iron and steel	19	70,544,399	4,958	8,708,854	14,329,688	30,655,496
18	Clothing, factory, women's	217	11,644,209	8,272	8,544,045	16,128,579	28,876,839
19	Sheet metal products	85	28,937,988	5,223	6,112,571	14,657,190	28,204,090
20	Furniture and upholstered goods	213	32,965,927	8,732	9,478,601	10,342,615	27,576,489
21	Agricultural implements	41	96,203,003	7,053	9,213,698	11,003,626	25,901,580
22	Railway rolling stock	15	26,070,126	4,761	7,116,865	14,705,443	24,918,647
23	Sawmills	874	46,486,317	9,239	5,635,710	14,588,779	24,714,168
24	Coke and gas products	21	50,344,731	2,604	3,805,978	10,479,948	23,912,806
25	Fruit and vegetable canning, etc	142	25,757,235	5,344	2,601,115	13,011,776	21,044,445
26	Printing and bookbinding	406	21,195,914	5,833	7,954,956	6,303,599	19,746,566
27	Planing mills	296	25,229,376	4,578	5,294,048	10,754,637	19,031,721
28	Breweries	31	21,002,975	1,581	2,272,016	5,028,446	18,708,835
29	Brass and copper products	79	16,955,188	3,316	4,004,369	9,920,982	18,094,967
20	Automobile supplies	40	16,296,716	3,417	4,323,790	10,510,505	17,947,064
31	Leather, tanned, etc	33	22,080,904	2,530	2,976,521	11,598,403	17,328,336
32	Boots and shoes, leather	60	10,053,244	4,561	4,352,707	6,937,366	14,296,327
33	Soaps and washing compounds	32	13,020,232	1,093	1,611,325	7,820,408	13,950,173
34	Bridge and structural steel work	8	12,588,104	2,664	4,274,326	6,549,172	13,655,056
35	Clothing, factory, men's	51	10,602,236	4,186	4,908,875	7,117,809	13,645,653
36	Hardware and tools	91	21,633,656	4,550	4,954,037	4,206,098	13,428,698
37	Acids, alkalies and salts	10	33,970,318	1,500	2,244,921	2,572,227	13,197,159
38	Condensed milk	23	7,525,099	759	950,637	2,065,214	11,948,834
39	Cotton yarn and cloth	14	18,107,873	4,236	3,392,127	5,871,783	11,186,560
40	Distilleries	5	33,431,130	844	1,199,137	3,187,644	10,523,480
	Totals, Forty Leading Industries	**7,021**	**1,968,136,199**	**228,676**	**279,118,190**	**666,535,587**	**1,331,743,997**
	Grand Totals, All Industries	**9,888**	**2,431,369,848**	**307,477**	**370,781,452**	**836,666,780**	**1,713,025,322**
	Percentage of forty leading industries to grand totals	71·00	80·95	74·37	75·27	79·67	77·74

Subsection 4.—The Manufactures of the Prairie Provinces, 1930.

The flour-milling industry is outstanding among the manufactures of the Prairie Provinces when treated as a single unit. During 1930, as may be seen from Table **16**, the gross value of production of flour mills was $41,892,162 (Manitoba, $13,467,194; Saskatchewan, $14,752,468; Alberta, $13,672,500). The second industry from the point of view of gross production was slaughtering and meat-packing with products valued at $41,276,942 (Manitoba, $19,745,659; Saskatchewan, $5,191,759; Alberta, $16,339,524). Petroleum products comprised the third largest industrial group, with an output valued at $22,986,549, followed by railway rolling stock, $22,403,323, butter and cheese, $21,946,491 and central electric stations, $15,937,545.

The order of the leading industries is somewhat different in each province. In Manitoba, the leading industries, with their gross value of products in 1930, were as follows: slaughtering and meat-packing ($19,745,659), railway rolling stock ($17,202,263), flour mills ($13,467,194) butter and cheese ($8,519,020) and central electric stations ($6,574,463). In Saskatchewan the leading industries were: flour mills ($14,752,468), butter and cheese ($7,083,895), slaughtering and meat-packing ($5,191,759), central electric stations ($4,711,212) and printing and publishing

($3,517,774). In Alberta, slaughtering and meat-packing ($16,339,524) was the leading industry, followed by flour mills ($13,672,500), petroleum products ($12,267,154), butter and cheese ($6,343,576) and railway rolling stock ($5,198,060).

The importance of these industries, based on such natural resources of the Prairie Provinces as grain-growing and cattle-raising areas, is evident.

16.—Statistics of Ten Leading Industries of Manitoba, Saskatchewan and Alberta, 1930.

Note.—Other leading industries, statistics of which cannot be given because there are fewer than three establishments in each industry, are: in Manitoba, bridge and structural steel work and cement; in Saskatchewan, petroleum refining. The statistics for these industries are included in the grand totals for the provinces.

MANITOBA.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$
1	Slaughtering and meat-packing....	6	4,376,357	1,123	1,460,903	15,464,796	19,745,659
2	Railway rolling stock............	4	10,718,251	5,727	8,209,751	8,397,573	17,202,263
3	Flour mills......................	30	5,135,981	515	579,591	10,528,092	13,467,194
4	Butter and cheese................	70	4,001,773	958	1,414,324	5,518,198	8,519,020
5	Central electric stations........	39	59,751,276	1,529	2,069,646	–	6,574,463
6	Printing and publishing..........	70	4,027,077	1,165	2,015,748	981,518	5,215,836
7	Bread and other bakery products.	124	3,210,955	1,009	1,140,348	2,129,915	4,238,061
8	Breweries........................	7	5,503,130	558	848,183	975,503	4,171,872
9	Printing and bookbinding.........	62	4,228,863	1,268	1,778,182	1,251,838	4,015,758
10	Bags, cotton and jute............	6	1,707,368	232	277,205	2,574,637	3,204,692
	Totals, Ten Leading Industries	**418**	**102,661,031**	**14,084**	**19,793,881**	**47,822,070**	**86,354,818**
	Grand Totals, All Industries....	**937**	**188,413,164**	**26,488**	**33,941,235**	**74,761,265**	**142,424,990**

SASKATCHEWAN.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
1	Flour mills......................	47	6,333,406	551	778,639	11,240,935	14,752,468
2	Butter and cheese................	75	5,087,985	748	927,133	4,465,601	7,083,895
3	Slaughtering and meat-packing....	3	1,893,419	443	545,389	3,442,974	5,191,759
4	Central electric stations........	144	22,925,271	754	1,030,976	–	4,711,212
5	Printing and publishing..........	139	3,316,306	852	1,514,536	628,004	3,517,774
6	Bread and other bakery products.	120	2,962,496	666	757,034	1,387,963	2,793,878
7	Breweries........................	9	3,772,075	237	330,911	1,002,760	2,701,106
8	Sawmills.........................	34	1,019,495	562	262,030	434,162	1,020,168
9	Planing mills....................	14	1,789,675	263	314,102	459,879	881,956
10	Dyeing, cleaning and laundry work	15	958,183	357	373,388	114,804	759,174
	Totals, Ten Leading Industries.	**600**	**50,058,311**	**5,433**	**6,834,138**	**23,177,082**	**43,413,390**
	Grand Totals, All Industries...	**750**	**65,486,140**	**7,248**	**9,229,593**	**35,608,157**	**62,276,766**

ALBERTA.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
1	Slaughtering and meat-packing....	6	8,684,669	1,246	1,599,178	12,849,314	16,339,524
2	Flour mills......................	37	9,874,386	608	765,429	10,553,070	13,672,500
3	Petroleum products...............	5	8,963,665	445	711,565	9,586,927	12,267,154
4	Butter and cheese................	97	3,661,615	593	714,844	4,761,811	6,343,576
5	Railway rolling stock............	3	3,510,077	1,919	2,676,257	2,419,972	5,198,060
6	Central electric stations........	71	27,525,124	776	1,205,586	–	4,651,870
7	Breweries........................	5	6,122,463	266	464,089	1,230,933	4,520,111
8	Printing and publishing..........	80	4,073,432	809	1,459,387	657,352	3,798,857
9	Bread and other bakery products.	149	2,961,761	733	828,673	1,738,199	3,524,008
10	Sawmills.........................	96	2,849,762	1,447	619,302	1,100,975	2,390,587
	Totals, Ten Leading Industries.	**549**	**78,226,954**	**8,842**	**11,044,310**	**44,898,553**	**72,706,247**
	Grand Totals, All Industries....	**845**	**109,930,271**	**14,099**	**17,092,033**	**53,621,884**	**94,314,782**

Subsection 5.—The Manufactures of British Columbia, 1930.[1]

British Columbia was in 1930 the third most important manufacturing province in the Dominion, producing goods to a gross value of $241,121,932. About 19 p.c. of this production, or $44,975,389, is seen in Table **17** to be that of the sawmilling industry; the predominance of forest products industries in the industrial life of the province is emphasized if to this figure be added $17,785,550, the gross value of products of the pulp and paper industry and $2,681,985, that of the planing mills and sash and door factories. Second in importance among the industries of the province is that of fish-curing and -packing, with a gross value of products of $21,131,067, followed by the pulp and paper industry, slaughtering and meat-packing and central electric stations.

17.—Statistics of Twenty-Five Leading Industries of British Columbia, 1930.[1]

NOTE.—Other leading industries, statistics of which cannot be given because there are fewer than three establishments in each industry, are: non-ferrous metal smelting, sugar refining, cement, explosives, cotton and jute bags, wood preservation and condensed milk. The statistics for these industries are included in the grand totals of the province.

No.	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
		No.	$	No.	$	$	$
1	Sawmills	301	49,051,770	11,737	13,134,242	25,244,013	44,975,389
2	Fish-curing and -packing	128	24,343,089	2,574	2,528,590	13,152,636	21,131,067
3	Pulp and paper	6	53,405,998	2,959	4,945,001	4,582,296	17,785,550
4	Slaughtering and meat packing	9	5.190.678	673	926,362	9,145,644	11,004,558
5	Central electric stations	77	87,857,974	1,765	2,812,464	–	10,817,779
6	Petroleum products	4	6,073,021	338	615,587	8,850,528	9,636,105
7	Printing and publishing	66	4,401,053	1,436	2,547,122	1,304,741	6,501,149
8	Bread and other bakery products	243	3,532,379	1,322	1,529,299	2,977,993	5,877,133
9	Butter and cheese	37	1,877,091	588	926,749	3,822,553	5,589,298
10	Sheet metal products	21	8,973,196	608	881,772	3,295,763	5,587,736
11	Fruit and vegetable canning, evaporating, etc	32	4,649,478	1,479	899,689	3,494,203	5,438,518
12	Breweries	10	6,614,095	266	440,116	1,205,438	4,438,920
13	Coffee, tea and spices	9	1,293,904	125	163,770	3,020,909	4,209,484
14	Castings and forgings	30	3,936,716	978	1,458,139	1,116,910	3,195,763
15	Shipbuilding and repairs	16	6,583,445	973	1,570,767	832,057	3,128,706
16	Coke and gas products	6	12,725,787	455	655,104	1,046,996	2,863,593
17	Dyeing, cleaning and laundry work	54	2,377,210	1,546	1,548,424	230,101	2,857,648
18	Planing mills, sash and door factories	45	3,614,312	824	1,061,352	1,049,147	2,681,985
19	Biscuits, confectionery, chocolate, etc	48	1,768,507	509	484,144	1,020,883	2,349,146
20	Printing and bookbinding	76	1,991,357	561	824,512	645,135	2,052,813
21	Boxes, wooden	13	886,673	452	445,862	886,183	1,648,116
22	Furniture	35	1,633,438	590	546,354	587,494	1,498,199
23	Wire and wire goods	8	1,237,646	122	175,421	577,933	1,431,231
24	Flour and feed mills	4	1,664,242	95	104,911	1,108,845	1,321,766
25	Paints, pigments and varnishes	9	1,571,852	169	224,919	652,109	1,193,794
	Totals, Twenty-Five Leading Industries	**1,287**	**297,254,911**	**33,144**	**41,450,672**	**89,850,510**	**179,215,446**
	Grand Totals, All Industries	**1,697**	**403,328,298**	**42,779**	**54,898,541**	**123,131,269**	**241,121,932**
	Percentages of twenty-five leading industries to grand totals	75·8	73·7	77·5	75·5	73·0	74·3

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[1] Including Yukon.

Section 4.—Principal Factors in Manufacturing Production.

Subsection 1.—Capital Employed.

In a retrospective study of capital employed in Canadian manufactures since 1900, the remarkable increase denotes rapid growth in industrial operations. From 1900 to 1905 the capital increased from $446,900,000 to $833,900,000, and advanced to $1,958,700,000 in 1915. During this period returns were received from establishments with 5 hands and over, and while the rise of wholesale prices did not exceed 37 p.c., the capital employed in manufactures increased nearly 340 p.c.

The capital investment in 1930 in all establishments irrespective of the number of employees was $5,203,316,760, as compared with $5,083,014,754 in 1929, and with $3,244,302,410 in 1922, an increase of 60 p.c. in 8 years.

The provincial distribution of the manufactures of Canada may be illustrated by the investments of capital. Capital employed in Ontario during 1920 was 49·5 p.c. of the total, 52·4 p.c. in 1923, 50·4 p.c. in 1925, 49·2 p.c. in 1927 and 46·6 p.c. in 1930. The percentages employed in the plants of Quebec were: 30·5 in 1920, 30·8 in 1921, 29·5 in 1924, 30·6 in 1926, 33·1 in 1928 and 33·2 in 1930. British Columbia held the third place in 1930 with a capital of 7·8 p.c. of the total, while Manitoba, New Brunswick, Nova Scotia and Alberta followed in the order named, with proportions of between 3·6 p.c. and 2·1 p.c. each. (Table **18**).

From a survey of the industrial groups in which the capital of the country is invested, it appears that the wood and paper group led in 1930, with an investment of 23·5 p.c. of the total. The central electric stations industry was second with 21·9 p.c., the iron and steel group third with 14·6 p.c., and the vegetable products group fourth with 10·9 p.c. (Table **19**).

The statistics of capital employed in the manufacturing industries are of interest in deducing the proportions of fixed and liquid assets. In 1921 lands, buildings and machinery constituted 60 p.c. of the total capital, while in 1923 the proportion had increased to 64 p.c., in 1924 to 65 p.c., and to 66 p.c. in 1926 to 1929, while in 1930 it amounted to 69 p.c. The fixed assets amounted to $3,584,344,724 in 1930, while quick assets, including the materials on hand, stocks in process, cash and sundries, were valued at $1,618,972,036. Details by provinces and by industrial groups are given in Table **20**.

18.—Provincial Distribution of Capital Employed in the Manufacturing Industries of Canada, in Percentages, 1921 and 1923-30.

Province.	1921.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
Prince Edward Island	0·1	0·1	0·1	0·1	0·1	0·1	0·1	0·1	0·1
Nova Scotia	3·3	3·3	3·1	3·1	3·0	2·9	2·9	2·7	2·6
New Brunswick	3·1	2·5	2·5	2·4	2·4	2·3	2·4	2·3	2·7
Quebec	30·8	29·8	29·5	29·9	30·6	31·7	33·1	32·9	33·2
Ontario	50·6	52·4	51·8	50·4	49·8	49·2	47·6	47·6	46·6
Manitoba	2·9	2·7	3·1	3·2	3·2	3·5	3·3	3·4	3·6
Saskatchewan	1·0	0·9	0·9	0·8	0·8	0·9	0·9	1·1	1·3
Alberta	1·7	1·8	1·9	1·8	1·8	1·9	2·0	2·1	2·1
British Columbia and Yukon	6·5	6·5	7·1	8·3	8·3	7·5	7·7	7·8	7·8
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

19.—Distribution of Capital Employed in the Manufacturing Industries of Canada, by Industrial Groups and Percentages, 1928-30.

Industrial Group.	1928.		1929.		1930.	
	Amount.	Percentage.	Amount.	Percentage.	Amount.	Percentage.
	$		$		$	
Vegetable products	531,918,725	11·1	569,064,835	11·2	569,403,769	10·9
Animal products	243,550,121	5·1	243,825,065	4·8	233,334,972	4·5
Textile products	365,721,591	7·7	383,153,797	7·5	368,567,643	7·1
Wood and paper	1,158,651,534	24·2	1,152,075,234	22·7	1,221,357,252	23·5
Iron and its products	702,931,186	14·7	754,989,105	14·8	757,797,256	14·6
Non-ferrous metals	253,367,370	5·3	298,721,106	5·9	325,605,549	6·2
Non-metallic minerals	298,693,122	6·3	329,448,844	6·5	336,018,922	6·5
Chemicals and allied products	148,939,920	3·1	165,886,912	3·3	168,119,152	3·2
Miscellaneous industries	119,602,877	2·5	130,118,324	2·5	84,912,229	1·6
Central electric stations	956,919,603	20·0	1,055,731,532	20·8	1,138,200,016	21·9
Totals	**4,780,296,049**	**100·0**	**5,083,014,754**	**100·0**	**5,203,316,760**	**100·0**

20.—Forms of Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1930.

Province and Group.	Establishments.	Land, Buildings, Fixtures, Machinery and Tools.	Materials on Hand, Stocks in Process, Finished Products, etc.	Cash, Trading and Operating Accounts and Bills Receivable.	Total Capital.
	No.	$	$	$	$
Totals	**24,020**	**3,584,344,724**	**848,927,120**	**770,044,916**	**5,203,316,760**
PROVINCE.					
Prince Edward Island	267	2,418,871	512,227	510,860	3,441,958
Nova Scotia	1,302	94,005,903	22,694,045	16,971,215	133,671,163
New Brunswick	924	96,689,690	19,831,890	24,089,950	140,611,530
Quebec	7,410	1,259,948,977	257,923,102	209,192,309	1,727,064,388
Ontario	9,888	1,576,267,017	429,936,376	425,166,455	2,431,369,848
Manitoba	937	142,192,334	24,921,511	21,299,319	188,413,164
Saskatchewan	750	48,243,224	10,848,555	6,394,361	65,486,140
Alberta	845	76,923,567	19,303,309	13,703,395	109,930,271
British Columbia and Yukon	1,697	287,655,141	62,956,105	52,717,052	403,328,298
INDUSTRIAL GROUP.					
Vegetable products	5,041	302,234,233	162,224,591	104,944,945	569,403,769
Animal products	4,341	124,297,828	60,163,696	48,873,448	233,334,972
Textiles and textile products	1,886	200,335,297	87,654,895	80,577,451	368,567,643
Wood and paper products	7,816	859,927,727	200,590,275	160,839,250	1,221,357,252
Iron and its products	1,196	422,153,520	160,552,656	175,091,080	757,797,256
Non-ferrous metal products	429	196,360,164	65,536,403	63,708,982	325,605,549
Non-metallic mineral products	1,234	251,894,211	54,114,879	30,009,832	336,018,922
Chemicals and allied products	591	96,264,566	32,441,260	39,413,326	168,119,152
Miscellaneous industries	452	46,930,748	14,810,904	23,170,577	84,912,229
Central electric stations	1,034	1,083,946,430	10,837,561	43,416,025	1,138,200,016

Subsection 2.—Employment in Manufactures.

The total number of persons engaged in those manufacturing industries of Canada for which statistics were obtained in 1930 was in that year 644,439, as compared with 694,434 in the same industries in 1929 and 474,430 in 1922. The

1930 employees included 92,943 salaried employees, this figure being obtained from the manufacturers at the end of the year, and 551,496 wage-earners, the average number employed as derived from the manufacturers' records of the numbers on the pay-rolls on the 15th of each of the twelve months. Prior to 1925 the number of wage-earners was computed as the sum of the number recorded each month divided by 12 whether the establishment was operating the 12 months or not. Beginning with the statistics for 1925, in seasonal industries which are in operation only a limited number of months in each year, such as sawmilling, fruit and vegetable canning, etc., the average was computed by dividing the sum of the wage-earners reported on the 15th of each month by the number of months in operation. This change of method increased the apparent number of employees, especially in seasonal industries but also in the groups containing such seasonal industries and in provincial and Dominion totals. Consequently, the change of method exerted a reducing influence on apparent average wages and on all other averages per wage-earner and per employee.

The number of salaried employees and of wage-earners, as thus ascertained, is given for each of the years since 1917, the year of the first annual census of manufacturing production, in Table **21.** Then, taking the percentages of the wage-earners and the total employees in each year to those in 1917, and dividing these percentages into the volume of manufacturing production in each year (see pp. 412 to 416 for the index of volume), the quotients give tentative conclusions regarding the efficiency of production per wage-earner and per employee in years subsequent to 1917, as compared with that year. Since central electric stations were excluded in computing the index of the volume of production, employees in these establishments have been excluded also in computing the percentages relative to 1917 for both wage-earners and total employees, and consequently from the indexes of efficiency of production. These indexes of the efficiency of production are, of course, affected by the change explained above in the method of computing the number of employees in 1925 and subsequent years as compared with 1924 and previous years. Inasmuch as the change increased the apparent number of employees in 1925 and later years, it proportionately decreased the index of the efficiency of production. The table illustrates the development of modern industry which has accomplished a large increase in production with a comparatively small increase in wage-earners by better organization and the use of improved equipment. Capital invested in manufacturing industries, exclusive of central electric stations, has increased by 73·8 p.c. from 1917 to 1930, compared with a decrease of 1·2 p.c. in wage-earners, while the horse power used per wage-earner has increased from 3·04 in 1917 to 7·49 in 1930. The factor of better organization is not susceptible of measurement. However, salaried employees have increased by 35·2 p.c. since 1917, or more nearly in proportion to the growth in production than wage-earners. The result of these developments has been the increase of 44·5 p.c. in the volume of production per wage-earner and the somewhat smaller increase of 39·7 p.c. per employee, owing to the increased proportion of salaried employees in the total. The indexes may be considered as supplying satisfactory evidence of a general gain in volume of production per person employed. In this connection it should be remembered, however, that in 1917, owing to the large numbers overseas, many persons of low efficiency were being employed, their inefficiency being concealed at the time by the prevailing inflation of prices; it is possible that the sudden rise in the indexes of efficiency from 1920 to 1921 may be partly accounted for by their elimination in the contraction of industrial operations which occurred at that time.

21.—Salaried Employees and Wage-Earners in the Manufacturing Industries of Canada, with Volume of Manufacturing Production and Comparative Efficiency of Production, 1917-30.

Year.	Salaried Employees.	Wage-Earners.	Total Employees.	Percentage relative to 1917.[1]		Index Number[1] of Volume of Mf'd. Products.	Efficiency of Production.[1]	
				Of Wage-Earners.	Of Total Employees.		Per Wage-Earner.	Per Employee.
	No.	No.	No.	p.c.	p.c.			
1917	68,726	552,968	621,694	100·0	100·0	100·0	100·0	100·0
1918	70,706	547,599	618,305	99·0	98·8	102·0	103·0	103·2
1919	81,681	529,327	611,008	95·7	98·1	98·1	102·5	100·0
1920	83,015	526,571	609,586	95·1	97·7	95·0	99·9	97·2
1921	74,873	381,203	456,076	68·5	72·6	86·1	125·6	118·6
1922	76,040	398,390	474,430	71·6	75·6	96·0	134·1	127·0
1923	78,273	446,994	525,267	80·5	83·9	104·8	130·2	124·9
1924	76,230	432,273	508,503	77·6	80·8	102·9	132·7	127·3
1925	77,623	466,602	544,225	83·8	86·6	112·7	134·5	130·1
1926	81,794	499,745	581,539	89·9	92·7	128·1	142·5	138·2
1927	85,483	533,450	618,933	95·8	98·6	136·5	142·5	138·5
1928	91,243	566,780	658,023	101·7	104·7	148·8	146·3	142·0
1929	96,607	597,827	694,434	107·5	110·6	157·5	146·6	142·4
1930	92,943	551,496	644,439	98·8	102·2	142·8	144·5	139·7

[1] Central electric stations excluded.

Statistics of employment in manufacturing industries during 1930 derived from the Census of Manufactures, are shown in Table 7 of this chapter, (pp. 424 to 429). According to these statistics, the 24,020 establishments covered, employed 92,943 salaried employees and 551,496 wage-earners, a total of 644,439 persons. Out of every 1,000 persons employed in manufacturing, 144 were classed as salary earners and 856 as wage-earners; the former earned 25·0 p.c. and the latter 75·0 p.c. of the total amount paid out as remuneration for services.

Provincial Distribution of Employees in 1930.—An analysis of the returns by provinces shows that 48,958 or 52·7 p.c. of all employees on salaries were employed in Ontario; of this number 35,747 were males and 13,211 were females. The proportion of the male salary workers in Ontario to the total of such workers was 50·7 p.c. while female office employees constituted 58·9 p.c. of the corresponding total. In Quebec, which with 25,928 persons recorded the second largest number of salaried workers, were situated 28·8 p.c. of the total male and 24·8 p.c. of the total female salaried employees. British Columbia also had a higher proportion of male than female salaried employees, having 6·5 p.c. of the total male to 4·6 p.c. of the total female salary earners. Of the total salaries, $97,716,795 or 53 p.c. was reported in Ontario, $52,328,030 or 28·4 p.c. in Quebec, and $11,380,384 or 6·1 p.c. in British Columbia.

Out of the total male wage-earners numbering 431,463 and the total female numbering 120,033, 47·1 p.c. of the former and 46·2 p.c. of the latter were employed in Ontario. Quebec manufacturers reported 30·4 p.c. of the total males as compared with 39·6 p.c. of the total females, while British Columbia had 7·7 p.c. of the former and 3·6 p.c. of the latter. As to earnings, Ontario firms paid out 49·5 p.c. of the total wages, Quebec 29·8 p.c. and British Columbia 7·9 p.c.

Distribution by Industries.—The wood and paper industries with 20,586 salaried employees, reported a larger number of these than any other group, having 22·1 p.c. of the total and paying 23·3 p.c. of the aggregate salaries; 24·7 p.c. of the total wage-earners, earning 23·9 p.c. of the total wages, belonged to this group. Only 9·2 p.c. of the total females working for wages were in the wood and paper industries, as compared with 29 p.c. of the total males on wages. The textile industries had 18·1 p.c. of the wage-earners who earned 14·3 p.c. of the total wages; the number of female workers in these industries formed 49·8 p.c. of the total females and the males only 9·3 p.c. of the aggregate of male wage-earners. In the iron and steel group, 18·7 p.c. of the total wage-earners were paid 23·5 p.c. of the total wages. The number of men employed in these industries constituted 23·3 p.c. of the total male wage-earners in 1930, while only 2·2 p.c. of the female wage-earners were engaged in iron and steel plants.

22.—Percentages of Male and Female Employees on Salaries and Wages and Percentages of Total Salaries and Wages, by Provinces and Groups of Industries, 1930.

Province and Group.	Employees on Salaries.			Salaries.	Employees on Wages.			Wages.
	Males.	Females.	Total.		Males.	Females.	Total.	
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
PROVINCE.								
Prince Edward Island	0·2	0·2	0·2	0·1	0·3	0·6	0·3	0·1
Nova Scotia	2·0	1·9	2·0	1·8	3·7	2·9	3·5	2·6
New Brunswick	1·9	1·8	1·8	1·7	3·1	2·6	3·0	2·1
Quebec	28·8	24·8	28·0	28·4	30·4	39·6	32·4	29·8
Ontario	50·7	58·9	52·7	53·0	47·1	46·2	46·9	49·5
Manitoba	4·6	4·2	4·4	4·4	4·3	3·0	4·0	4·7
Saskatchewan	2·6	1·6	2·3	1·9	1·1	0·3	1·0	1·0
Alberta	2·7	2·0	2·6	2·6	2·3	1·2	2·1	2·3
British Columbia and Yukon	6·5	4·6	6·0	6·1	7·7	3·6	6·8	7·9
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
INDUSTRIAL GROUP.								
Vegetable products	11·2	12·8	11·6	11·5	11·3	20·3	13·3	11·1
Animal products	11·2	8·5	10·6	8·3	8·2	10·4	8·7	7·3
Textile products	9·0	15·0	10·5	10·3	9·3	49·8	18·1	14·3
Wood and paper products	22·4	21·4	22·1	23·3	29·0	9·2	24·7	23·9
Iron and its products	18·7	15·5	17·9	19·5	23·3	2·2	18·7	23·5
Non-ferrous metal products	7·9	8·7	8·1	8·3	6·2	3·8	5·7	6·7
Non-metallic mineral products	4·6	3·3	4·3	4·4	5·8	0·6	4·7	5·7
Chemicals and allied products	4·5	5·6	4·8	5·1	2·0	2·2	2·0	2·2
Miscellaneous industries	2·4	2·8	2·4	2·5	2·4	1·5	2·2	2·5
Central electric stations	8·1	6·4	7·7	6·8	2·5	-	1·9	2·8
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

Monthly Record of Employment in Manufactures, 1930.—A monthly record of the number of wage-earners employed in Canadian manufactures, as compiled by the Census of Industry, is given by sex for 1929 and 1930 in Table **23.** The peak of employment during 1930 was in May and for 1929 in June. Ordinarily manufacturing employment in Canada reaches its highest point about September. Some of the seasonal industries such as canning are most active then, textile industries are preparing winter goods and industry generally feels the active demand of the agricultural purchasing power resulting from the season's harvests. In 1929, however, the rising tide of "good times" was checked about midsummer and the recession set in during the autumn with the stock market crash. The harvests of 1929 in the Canadian West were disappointing also. In February 1930, employment began to pick up moderately. This expansion continued until May, after which there was a recession to the end of the year. The maximum employment for the two years was reached in June 1929 when 596,544 wage-earners were employed. This figure dropped to 510,061 in Jan. 1930, rose again to 556,386 in May and then fell to 464,086 in December 1930, a level practically the same as that of January, 1927.

While employment for male operatives expanded from the beginning of the year to its maximum in May, the number of female workers was greatest in September, chiefly on account of seasonal activity in the vegetable and fruit preserving group, which employs a considerable proportion of women. Textiles, the one group in which the majority of workers are women, also reported an active period during the autumn.

23.—Total Number of Wage-Earners Employed in the Manufacturing Industries of Canada, by Months, 1929 and 1930.

Month.	1929.			1930.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	409,663	111,564	521,227	401,937	108,124	510,061
February	422,912	114,904	537,816	406,854	110,708	517,562
March	439,106	116,802	555,908	416,304	111,662	527,966
April	456,326	118,943	575,269	424,877	112,233	537,110
May	473,017	121,952	594,969	440,740	115,646	556,386
June	474,157	122,387	596,544	437,339	114,827	552,166
July	473,261	121,618	594,879	427,000	112,354	539,354
August	464,087	124,422	588,509	414,618	114,785	529,403
September	455,918	130,521	586,439	409,052	121,078	530,130
October	446,752	127,814	574,566	395,666	116,549	512,215
November	425,729	121,968	547,697	375,842	111,084	486,926
December	404,700	114,631	519,331	359,671	104,415	464,086

Subsection 3.—Salaries and Wages in Canadian Manufacturing Industries, 1930.

The total salaries and wages disbursed by manufacturers during 1930 was $736,092,766 paid to 644,439 workers, compared with $813,049,842 paid to 694,434 persons in 1929, $510,431,312 paid to 474,430 persons in 1922 and $732,120,585 paid to 609,586 persons in 1920 at the peak of the post-war inflation. Of the 1930 aggregate, $184,239,117 or 25 p.c. was paid to 92,943 salaried employees who constituted 14·4 p.c. of the total number, and $551,853,649 or 75 p.c. was paid in wages to 551,496 wage-earners who formed 85·6 p.c. of the aggregate number of employees.

The average salary paid in the manufacturing industries during 1930 was $1,982, compared with $1,954 in 1929, $1,899 in 1927, $1,843 in 1925 and $1,791 in 1922. The average salary in 1930, *viz.* $1,982 is shown to be $28 or 1·4 p.c. higher than in 1929 and $191 or 10·7 p.c. higher than in 1922. The average wage paid was $1,001 in 1930, $1,045 in 1929, $997 in 1927, $971 in 1925 and $939 in 1922. Thus this average wage of $1,001 in 1930 was $44 or 4·2 p.c. lower than in 1929 but $62 or 6·6 p.c. higher than in 1922.

Average Earnings, by Provinces, of Persons Employed in Manufactures.—Table **24** shows the number of salary and wage-earners and the average salary and wage paid in 1930 by manufacturers in the various provinces, also average earnings in 1929.

In 1930 there were successive rises in average salaries in each province, excepting New Brunswick which recorded a slight decrease as compared with the previous year. British Columbia showed the highest average of $2,026, followed by Quebec with $2,018 and Ontario with $1,996. The head offices of many large corporations being located in Montreal, Toronto and Vancouver tends to raise the average salaries in these provinces. In the Prairie Provinces the averages were smaller, especially in Saskatchewan and Alberta, while in the Maritime Provinces average salaries were still lower, there being comparatively few large executive offices in these provinces.

All provinces with the exception of British Columbia, Alberta and Prince Edward Island reported lower wages in 1930. British Columbia with an average wage of $1,171 was the highest in the Dominion, being $70 higher than the general average. In the western provinces average wages are usually higher; this being due to an unusually small proportion of women workers, while many of the male employees were engaged in the better-paid wood and paper, electric light and power industries. In the four provinces situated to the east, average wages in manufacturing were lower than the mean for the Dominion, while from Ontario westward the opposite was the case.

The seasonal nature of some of the leading manufactures, notably fish-preserving and lumbering, tends to reduce the mean wage in the Maritime Provinces and Quebec, and Quebec also has a larger proportion of female wage-earners employed chiefly in the textile, food and tobacco industries, than any other province, except Prince Edward Island.

24.—Employees on Salaries and Wages in Manufacturing Industries, 1930, and Average Salaries and Wages, by Provinces, 1929 and 1930.

Province.	Employees on Salaries.			Average Salaries.		Employees on Wages.			Average Wages.	
	Male.	Female.	Total.	1930.	1929.	Male.	Female.	Total.	1930.	1929.
	No.	No.	No.	$	$	No.	No.	No.	$	$
Prince Edward Island	147	38	185	1,064	967	1,116	754	1,870	311	302
Nova Scotia	1,456	433	1,889	1,769	1,725	15,739	3,441	19,180	740	774
New Brunswick	1,356	386	1,742	1,811	1,816	13,508	3,172	16,680	709	748
Quebec	20,353	5,575	25,928	2,018	1,988	131,433	47,441	178,874	920	966
Ontario	35,747	13,211	48,958	1,996	1,975	203,119	55,400	258,519	1,056	1,110
Manitoba	3,177	930	4,107	1,960	1,900	18,787	3,594	22,381	1,112	1,179
Saskatchewan	1,775	362	2,137	1,703	1,699	4,679	432	5,111	1,094	1,151
Alberta	1,934	446	2,380	1,862	1,778	10,255	1,464	11,719	1,080	1,077
British Columbia and Yukon	4,580	1,037	5,617	2,026	1,921	32,827	4,335	37,162	1,171	1,111
Totals	**70,525**	**22,418**	**92,943**	**1,982**	**1,954**	**431,463**	**120,033**	**551,496**	**1,001**	**1,045**

Average Earnings in Forty Leading Industries.—Table **25** shows employees by sex and average salaries and wages in the forty leading industries during 1930, together with the salaries and wages paid in 1929. The rank of each industry is based on the aggregate of salaries and wages paid, as in Table **12** on p. 438.

Average Salaries.—In six industries the average salaries exceeded $2,500; in seventeen they were from $2,000 to $2,500; in sixteen they ranged between $1,500 and $2,000, while in only one were they below $1,500 in 1930. None of the six industries paying the highest salaries—breweries, pulp and paper mills, bridge and structural steel, non-ferrous metal smelting, petroleum, and primary iron and steel—reported a proportion of female workers equal to the general percentage in the forty leading industries, while the numbers employed were rather small except in the pulp and paper industry. The lowest salaries were reported by the butter and cheese industry. This is due to the fact that butter and cheese factories usually work less than the average number of days and are mainly situated in small towns and country places.

Average Wages.—The highest wages, or those above $1,500 were paid in three industries—engraving, stereotyping and electrotyping; bridge and structural steel; and non-ferrous metal smelting—in all of which the proportion of skilled workers is probably high. In nine other industries the average wage ranged between $1,200 and $1,500. These were largely metal-working industries, non-metallic mineral products, printing and publishing and central electric stations, in all of which the proportion of women employed was low. In thirteen industries the average wage was between $1,000 and $1,200 while in the remaining fifteen the average was below $1,000. This last group included such seasonal industries as sawmilling, and the flour and grist-mill industry with a large number of small grist mills in which work is intermittent. The other industries with low average wages were textiles, tobacco, and boots and shoes, in which the proportions of female wage-earners were high, the numbers in several industries being greater than those of the male.

25.—Statistics of Salaries and Wages Paid in Forty Leading Industries, 1930, together with Comparative Figures of Average Salaries and Wages Paid in 1929.

(Industries ranked according to the aggregate salaries and wages paid as in Table 12.)

Industry.	Total Salaries and Wages.	Employees.	Salaries.				
			Salaried Employees.			Average Salaries.	
			Male.	Female.	Salaries.	1930	1929
	$	No.	No.	No.	$	$	$
Pulp and paper	45,774,976	33,207	2,976	556	9,538,588	2,701	2,512
Railway rolling stock	37,625,050	25,952	1,739	109	4,203,257	2,274	2,230
Sawmills	28,512,901	43,457	1,465	210	3,386,658	2,022	2,063
Central electric stations	27,287,443	17,858	5,727	1,438	12,448,129	1,737	1,690
Printing and publishing	26,937,052	17,063	4,959	1,748	11,831,366	1,764	1,695
Electrical apparatus and supplies	26,260,004	20,568	3,568	1,348	9,620,479	1,957	1,793
Castings and forgings	25,871,261	20,499	1,912	607	5,574,926	2,213	2,180
Automobiles	19,473,782	12,541	1,631	577	4,775,918	2,163	2,282
Bread and other bakery products	19,444,533	17,736	700	391	1,669,572	1,530	1,400
Clothing, factory, women's	16,483,011	16,782	1,117	784	3,630,112	1,910	1,945
Rubber goods, including footwear	15,895,479	15,163	1,523	496	3,739,599	1,852	1,841
Printing and bookbinding	15,663,048	11,567	1,529	540	4,394,820	2,076	2,070
Machinery	15,089,887	11,044	1,835	609	5,068,744	2,074	1,930
Hosiery, knitted goods and gloves	15,057,147	18,570	744	538	2,623,121	2,047	2,135
Primary iron and steel	14,934,325	9,723	664	130	1,992,950	2,510	2,452
Non-ferrous metal smelting and refining	13,796,124	8,626	690	98	2,009,895	2,551	2,563
Butter and cheese	13,071,916	11,980	3,727	721	4,935,243	1,110	1,111
Cotton yarn and cloth	13,004,793	16,999	412	95	1,110,927	2,191	2,320
Boots and shoes, leather	12,858,062	13,922	877	343	2,370,504	1,943	1,978
Furniture	12,774,596	11,980	894	324	2,615,142	2,147	2,108
Dyeing, cleaning and laundry work	12,141,767	12,732	731	468	2,064,474	1,722	1,785
Slaughtering and meat packing	12,114,667	9,290	1,451	288	3,539,917	2,036	1,892
Clothing, factory, men's	11,542,990	10,836	939	392	2,464,204	1,851	1,828
Biscuits, confectionery, chocolate, etc	11,104,668	12,291	1,410	662	3,607,864	1,741	1,963
Planing mills, sash and door factories, etc	10,981,763	9,651	977	212	2,275,359	1,914	1,846
Sheet metal products	10,452,887	8,728	1,059	342	2,603,195	1,858	1,893
Agricultural implements	9,564,049	7,405	1,182	348	2,915,138	1,905	1,883
Bridge and structural steel work	8,686,062	4,943	961	97	2,740,971	2,591	2,530
Petroleum products	8,190,130	5,134	460	63	1,317,159	2,518	2,457
Tobacco, cigars and cigarettes	7,837,711	8,905	1,015	375	2,861,409	2,059	1,823
Shipbuilding and repairs	7,145,593	5,139	507	57	1,192,618	2,115	2,248
Breweries	6,756,634	4,642	687	118	2,250,850	2,796	2,695
Brass and copper products	6,742,752	5,297	781	224	1,986,431	1,977	1,735
Hardware and tools	6,717,192	6,220	601	225	1,824,029	2,208	2,176
Flour and grist-mill products	6,679,113	5,923	819	193	2,011,876	1,988	1,901
Furnishing goods, men's	6,437,718	8,965	498	268	1,422,843	1,857	1,770
Coke and gas products	5,864,802	3,970	703	244	1,561,727	1,649	1,652
Engraving, stereotyping and electrotyping	5,025,485	2,807	442	176	1,388,043	2,246	-
Clay products, from domestic clay	4.961,130	5,026	345	54	922,499	2,312	2,268
Boxes and bags, paper	4,921,735	5,062	489	233	1,466,852	2,030	2,178
Totals, Forty Leading Industries	**579,684,238**	**498,203**	**54,746**	**16,701**	**139,957,408**	-	-
Grand Totals, All Industries	**736,092,766**	**644,439**	**70,525**	**22,418**	**184,239,117**	**1,982**	**1,954**

25.—Statistics of Salaries and Wages Paid in Forty Leading Industries, 1930, together with Comparative Figures of Average Salaries and Wages Paid in 1929—concluded.

(Industries ranked according to the aggregate salaries and wages paid as in Table **12**.)

Industry.	Wages.				
	Wage-Earners.			Average Wage.	
	Male.	Female.	Wages.	1930.	1929.
	No.	No.	$	$	$
Pulp and paper	28,911	764	36,236,388	1,221	1,341
Railway rolling stock	24,068	36	33,421,793	1,387	1,455
Sawmills	41,704	78	25,126,243	601	723
Central electric stations	10,693	–	14,839,314	1,388	1,425
Printing and publishing	8,722	1,634	15,105,686	1,459	1,465
Electrical apparatus and supplies	12,095	3,557	16,639,525	1,063	1,120
Castings and forgings	17,688	292	20,296,335	1,129	1,206
Automobiles	10,197	136	14,697,864	1,422	1,529
Bread and other bakery products	14,414	2,231	17,774,961	1,068	1,060
Clothing, factory, women's	4,041	10,840	12,852,899	864	884
Rubber goods, including rubber footwear	9,333	3,811	12,155,880	925	1,028
Printing and bookbinding	7,088	2,410	11,268,228	1,186	1,198
Machinery	8,420	180	10,021,143	1,165	1,239
Hosiery, knitted goods and gloves	5,583	11,705	12,434,026	719	741
Primary iron and steel	8,906	23	12,941,375	1,449	1,597
Non-ferrous metal smelting and refining	7,838	–	11,786,229	1,504	1,617
Butter and cheese	7,275	257	8,136,673	1,080	1,050
Cotton yarn and cloth	9,479	7,013	11,893,866	721	771
Boots and shoes, leather	7,785	4,917	10,487,558	826	871
Furniture	10,296	466	10,159,454	944	1,008
Dyeing, cleaning and laundry work	4,596	6,937	10,077,293	874	862
Slaughtering and meat packing	6,738	813	8,574,750	1,136	1,122
Clothing, factory, men's	4,605	4,900	9,078,786	955	1,078
Biscuits, confectionery, chocolate, etc	4,497	5,722	7,496,804	734	761
Planing mills, sash and door factories, etc	8,375	87	8,706,404	1,029	1,045
Sheet metal products	6,604	723	7,849,692	1,071	1,094
Agricultural implements	5,807	68	6,648,911	1,132	1,188
Bridge and structural steel work	3,885	–	5,945,091	1,530	1,605
Petroleum products	4,592	19	6,872,971	1,491	1,544
Tobacco, cigars and cigarettes	2,768	4,747	4,976,302	662	661
Shipbuilding and repairs	4,569	6	5,952,975	1,301	1,310
Breweries	3,785	52	4,505,784	1,175	1,201
Brass and copper products	3,958	334	4,756,321	1,108	1,147
Hardware and tools	4,647	747	4,893,163	907	1,019
Flour and grist-mill products	4,779	132	4,667,337	950	976
Furnishing goods, men's	1,061	7,138	5,014,875	612	638
Coke and gas products	3,017	6	4,303,075	1,423	1,483
Engraving, stereotyping and electrotyping	1,728	461	3,637,442	1,662	–
Clay products, from domestic clay	4,627	–	4,038,631	873	935
Boxes and bags, paper	1,996	2,344	3,454,883	796	812
Totals, Forty Leading Industries	**341,170**	**85,586**	**439,726,830**	–	–
Grand Totals, All Industries	**431,463**	**120,033**	**551,853,649**	**1,001**	**1,045**

Real Earnings of Employees in Recent Years.—When the index number representing the average yearly wages, with 1917 as a base, is divided by the index number of the cost of living, converted to the same base, it is seen that real wages advanced by 13·6 p.c. between 1917 and 1930. The details of the computation are given in Table **26**. There was little change in real wages during the three years 1917 to 1920 when prices were rising rapidly. During the following two years, 1921 and 1922, when prices dropped rapidly, real wages increased over 5 p.c. Since then there has been an almost continuous rise from year to year with the exception of 1930. In 1929 real wages reached a maximum of 117·7.

26.—Average Yearly Earnings and Real Wages of Wage-Earners in Manufacturing Industries, 1917-30.

Year.	Amount of Wages Paid.	Average Number of Wage-Earners.	Average Yearly Earnings.	Index Numbers.		
				Average Yearly Earnings.	Cost of Living.	Real Value of Average Yearly Earnings.
	$	No.	$			
1917	420,094,869	552,968	760	100·0	100·0	100·0
1918	480,949,599	547,599	878	115·5	113·8	101·5
1919	496,570,995	529,327	938	123·4	125·3	98·5
1920	583,853,225	526,571	1,109	145·9	145·2	100·4
1921	381,910,145	381,203	1,002	131·8	127·6	103·2
1922	374,212,141	398,390	939	123·6	116·8	105·8
1923	428,731,347	446,994	959	126·1	116·8	107·9
1924	420,269,406	432,273	972	127·9	114·5	111·7
1925	452,958,655	466,602	971	127·8	116·0	110·2
1926	501,144,989	499,745	1,003	132·0	116·8	113·0
1927	531,583,250	533,450	997	131·3	115·1	114·1
1928	580,428,493	566,780	1,024	134·8	115·6	116·5
1929	624,302,170	597,827	1,045	137·5	116·8	117·7
1930	551,853,649	551,496	1,001	131·7	115·9	113·6

Percentages of Salaries and Wages to Value of Products.—Table **27** shows the relation between salaries and wages paid by manufacturers and the total net value of production. Figures of gross production are often used in such calculations, but the values out of which the wages of employees must in the long run come are the values added to the raw materials while they are in the factory. Such added values constitute the real production of the manufacturing plant and are alone available for payment of wages and salaries, of interest, rent and taxes, charges for fuel, power, lighting, repairs, and all other overhead charges. The percentage of salaries was highest in the years 1921, 1922 and 1924. These were years in which manufacturing production was curtailed and it is probable that, salaried employees being a part of the organization of an industry rather than of its productive force, salaries were an abnormally high percentage of the lower levels of production then prevailing. The percentage has declined with the increasing manufacturing production since 1922, but in 1929 was still much higher than in 1917, while in 1930, due to decreased industrial activity, the percentage of salaries to value added rose to 10·5, an increase of 1 p.c. over the previous year. It should be borne in mind, however, that salaried employees increased by 35·2 p.c. in the period, while wage-earners decreased 1·2 p.c. (Table **21**). The percentage of wages has fluctuated much less than that of salaries. The number of wage-earning employees may be more readily adjusted to the activity of the industry and wage levels likewise more readily adjusted to the price levels of the products. The percentage of wages to the values added in manufacture was thus almost the same in 1930 as in 1917. The percentage was highest in 1920, when, in the post-war inflation, average wages were highest (Table **26**) and the efficiency of production lowest (Table **21**).

27.—Percentages of Salaries and Wages Paid to Total Net Value of Manufacturing Production, 1917-30.

Year.	Value Added by Process of Manufacture.	Salaries Paid.	Wages Paid.	Percentage—		
				of Salaries to Values Added.	of Wages to Values Added.	of Total Salaries and Wages to Values Added.
	$	$	$	p.c.	p.c.	p.c.
1917	1,332,180,767	89,287,158	420,094,869	6·7	31·5	38·2
1918	1,460,723,777	101,507,889	480,949,599	6·9	32·9	39·8
1919	1,509,870,745	121,892,144	496,570,995	8·1	32·9	41·0
1920	1,686,978,408	148,267,360	583,853,225	8·8	34·6	43·4
1921	1,209,143,344	136,874,992	381,910,145	11·3	31·6	42·9
1922	1,198,434,407	136.219,171	374,212,141	11·4	31·2	42·6
1923	1,311,025,375	142,738,681	428,731,347	10·9	32·7	43·6
1924	1,256,643,901	139,614,639	420,269,406	11·1	33·4	44·5
1925	1,360,879,907	143,056,516	452,958.655	10·5	33·3	43·8
1926	1,492,645,039	152,705,944	501,144,989	10·2	33·6	43·8
1927	1,635,923,936	162,348,978	531,583,250	9·9	32·5	42·4
1928	1,819,046,025	174,770,879	580,428,493	9·7	31·9	41·6
1929	1,997,350,365	188,747,672	624,302,170	9·5	31·3	40·8
1930	1,761,986,726	184,239,117	551,853,649	10·5	31·3	41·8

Subsection 4.—Size of Manufacturing Establishments.

An essential characteristic of the recent evolution of industry has been the increase in the size of the typical manufacturing establishment. The full utilization of highly specialized machinery necessitates large-scale production, while the improvements in transportation have widened the market, and the development of more efficient methods of business administration has made it possible for the individual manufacturer to supervise effectively a larger plant. An increase in the scale of production of the typical manufacturing establishment has been experienced in all industrial countries which have been affected by the so-called "Industrial Revolution", and not least in Canada where the rise of the factory system in industry has taken place approximately since Confederation.

The size of the manufacturing establishment is generally measured either by the number of employees or by the value of product, but each of these methods has its limitations. The former takes no account of the differences in capital equipment at different times or in various industries and obviously the increased use of machinery, as in the flour-milling industry, may lead to increased production concurrently with a decrease in the number of employees. The latter measure has to be adjusted for changes in the price level; and, as between industries, it makes those which handle expensive raw materials appear to operate on a larger scale. Both measures are subject to two limitations: first, they depend on the fluctuation of business activity and the demand of the consumer; secondly, over any lengthy period of time there is the difficulty of comparability resulting from changes in the method of the census.

Thus, while it is possible in a general way to state that the average size of the manufacturing establishment in Canada has increased between 1870 and 1930, the 1930 figures are not on the same basis as the 1870 figures, especially since they do not include all the small custom and repair establishments included at the earlier date. The same difficulty arises right up to the most recent times. It is only in the last few years that the statistics have been so analysed as to be strictly comparable, and the results of this analysis are given in Tables **28** to **31.**

Size as Measured by Gross Value of Products.—In Tables **28** and **29** the size of the establishments reporting to the Census of Manufactures is shown by the gross value of products—Table **28** giving comparative figures for 1922 (the first year for which the figures are available) and 1930, and Table **29** the figures by provinces for 1930.

The comparative Table **28** shows that, while in 1922 the 420 establishments which had each a gross production of over $1,000,000 had an aggregate value of products of $1,268,056,129 or 51 p.c. of the total production of all manufacturing industries, the 626 establishments producing over $1,000,000 each in 1930 had an aggregate value of products of $2,046,162,259, or 59 p.c. of the grand total for all manufacturing establishments—a very significant change in the short period of eight years when the general trend of prices of manufactured goods was slightly downward.

28.—Manufacturing Establishments Grouped According to Gross Values of Products, with Total and Average Values of Products in each Class, for Canada, 1922 and 1930.

Group.	1922.			1930.		
	Establishments.	Total Production.	Average Production.	Establishments.	Total Production.	Average Production.
Gross Value of Products.	No.	$	$	No.	$	$
Under $25,000	14,978	114,205,770	7,625	14,900	96,354,806	6,467
$ 25,000 but under $ 50,000	2,401	85,075,807	35,433	2,729	96,674,700	35,425
50,000 " 100,000	1,793	129,320,947	72,125	2,114	149,666,114	70,798
100,000 " 200,000	1,355	191,675,689	141,458	1,657	235,533,089	142,144
200,000 " 500,000	1,078	330,533,712	306,617	1,441	451,251,620	313,152
500,000 " 1,000,000	516	363,341,076	704,149	553	392,123,808	709,085
1,000,000 " 5,000,000	364	692,463,530	1,902,372	528	1,063,296,928	2,013,820
5,000,000 and over	56	575,592,599	10,278,439	98	982,865,331	10,029,239
Totals	**22,541**	**2,482,209,130**	**110,119**	**24,020**	**3,467,766,396**[1]	**144,370**

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[1] The value of production in 1930 shown above is greater in the aggregate by $38,795,768 than the value of production shown in the other tables of this report. This is due to the elimination from the other tables of the value of electric energy purchased by central electric stations from other generating plants for distribution to local consumers. For the reporting plant, however, the cost of such power is regarded as the cost of materials. This necessarily involves a duplication in the value of production which it is impossible to make compensation for, as between the groups.

29.—Manufacturing Establishments, Grouped According to Gross Values of Products, with Total Values of Products in each Class, by Provinces, 1930.

Group.	Prince Edward Island.		Nova Scotia.		New Brunswick.	
	Establishments.	Production.	Establishments.	Production.	Establishments.	Production.
Gross Value of Products. (000 omitted.)	No.	$	No.	$	No.	$
Under $ 25	226	1,526,118	996	6,491,279	687	3,926,301
$ 25— 50	25	816,292	108	3,771,567	85	2,853,699
50— 100	8	494,301	88	6,186,884	54	3,766,971
100— 200	8[1]	1,418,781	49	6,912,055	41	5,983,294
200— 500			42	12,837,733	32	10,165,926
500— 1,000	–	–	6	4,081,455	15	11,387,455
1,000— 5,000	–	–	10	23,278,331	10[1]	26,059,761
5,000 and over	–	–	3	23,000,611		
Totals	**267**	**4,255,492**	**1,302**	**86,559,915**	**924**	**64,143,407**

Group.	Quebec.		Ontario.		Manitoba.	
Under $ 25	5,132	35,541,983	5,302	28,851,927	522	4,198,370
$ 25— 50	666	23,586,978	1,343	47,536,649	107	3,865,980
50— 100	514	36,505,913	1,056	74,831,848	105	7,406,852
100— 200	398	57,191,094	824	116,806,879	87	12,293,227
200— 500	367	113,317,358	757	238,800,350	69	21,896,374
500— 1,000	146	102,452,162	290	206,332,146	16	11,811,581
1,000— 5,000	154	330,614,710	272	532,201,066	26	50,121,410
5,000 and over	33	329,253,925	44	492,657,574	5	31,971,986
Totals	**7,410**	**1,028,464,123**	**9,888**	**1,738,018,439**	**937**	**143,565,780**

Group.	Saskatchewan.		Alberta.		British Columbia.	
Under $ 25	533	3,080,482	555	4,777,194	947	7,961,152
$ 25— 50	74	2,639,123	114	4,214,072	207	7,390,340
50— 100	63	4,510,752	56	3,876,452	170	12,086,141
100— 200	43	5,990,179	51	7,022,219	158	22,505,286
200— 500	19	6,058,294	29	9,058,598	124	38,527,062
500— 1,000	9	6,719,765	17	11,309,511	54	38,029,733
1,000— 5,000	9[1]	34,037,582	23[1]	54,945,364	29	51,913,755
5,000 and over					8	66,106,184
Totals	**750**	**63,036,177**	**845**	**95,203,410**	**1,697**	**244,519,653**

[1] Includes one of the larger class grouped with those of the smaller class to avoid showing the individual production of any one establishment.

Size of Establishments as Measured by Number of Employees.—In Tables **30** and **31** the establishments reporting to the Census of Manufactures are classified by the number of their employees. In the comparative Table **30**, it is shown that out of a total increase of 123,102 employees in our manufacturing industries between 1923 and 1930, 54,628, or almost 45 p.c., were in establishments with over 500 employees.

30.—Number of Establishments and of Employees in Canadian Manufactures, Grouped According to the Number of Employees per Establishment, 1923 and 1930.

Group.	1923.			1930.		
	Establishments.	Employees.	Average Employed.	Establishments.	Employees.	Average Employed.
	No.	No.	No.	No.	No.	No.
Fewer than 5 employees.....	13,156	23,632	1·7	12,620	24,186	1·9
5 to 20 employees........	5,310	53,852	10·1	6,319	63,317	10·02
21 " 50 "	2,093	67,408	32·2	2,548	81,383	31·9
51 " 100 "	1,031	73,449	71·2	1,217	86,077	70·7
101 " 200 "	566	79,737	140·8	737	102,626	139·2
201 " 500 "	374	115,585	309·0	405	124,548	307·5
501 and over................	112	112,447	1,004·0	174	167,075	960·2
Totals..............	**22,642**	**526,110**[1]	**23·2**	**24,020**	**649,212**[2]	**27·0**

[1] In order to make the figures comparable this total is computed by dividing the employees in each establishment in each month by the actual number of months the establishment was in operation, while in Table 1 of this chapter the sum was divided by 12 for all establishments (see p. 449, subsection 2).

[2] This total of employees in 1930 exceeds the total of 644,439 given elsewhere in this report because 4,773 contract workers in the salmon canneries of British Columbia are included here but are excluded elsewhere.

31.—Number of Establishments and of Employees in Canadian Manufactures, by Provinces, and Average Number of Employees per Establishment, 1930.

Province.	Under 5 Employees.	5-20.	21-50.	51-100.	101-200.	201-500.	501 and over.	Total.
Prince Edward Island—								
Establishments..............	157	81	26	3	-	-	-	267
Employees....................	268	836	772	179	-	-	-	2,055
Average per establishment.....	1·7	10·3	29·6	59·6	-	-	-	7·7
Nova Scotia—								
Establishments................	645	439	146	44	13	11	4	1,302
Employees....................	1,254	4,467	4,379	3,088	1,605	3,766	2,510	21,069
Average per establishment.....	1·9	10·1	29·9	70·1	123·4	342·0	628·2	16·2
New Brunswick—								
Establishments................	418	317	126	34	15	11	3	924
Employees....................	836	3,213	3,678	2,295	2,142	3,763	2,495	18,422
Average per establishment.....	2·0	10·1	29·1	67·5	142·8	342·0	831·8	19·9
Quebec—								
Establishments................	4,469	1,564	662	323	189	131	72	7,410
Employees....................	7,355	15,918	21,270	23,020	26,096	42,034	69,109	204,802
Average per establishment.....	1·6	10·1	32·1	71·2	138·07	320·8	959·1	27·6
Ontario—								
Establishments................	4,715	2,788	1,139	585	379	198	84	9,888
Employees....................	10,436	27,697	36,814	41,272	53,844	58,130	79,284	307,477
Average per establishment.....	2·2	9·9	32·3	70·5	142·1	293·5	943·8	31·0
Manitoba—								
Establishments................	448	268	121	51	25	20	4	937
Employees....................	922	2,690	3,929	3,475	3,391	5,695	6,386	26,488
Average per establishment.....	2·0	10·0	32·4	68·1	135·6	284·7	1,596·5	28·3
Saskatchewan—								
Establishments................	525	145	47	18	12	3	-	750
Employees....................	732	1,332	1,421	1,208	1,717	838	-	7,248
Average per establishment.....	1·3	9·1	30·2	67·1	143·0	279·3	-	9·6
Alberta—								
Establishments................	517	198	65	34	22	9	-	845
Employees....................	933	1,872	2,173	2,429	2,874	3,818	-	14,099
Average per establishment.....	1·8	9·4	33·4	71·4	130·6	424·2	-	16.7
British Columbia—								
Establishments................	726	519	216	125	82	23	6	1,697
Employees....................	1,450	5,292	6,947	9,111	10,957	7,691	6,104	47,552[1]
Average per establishment.....	1·9	10·1	32·1	72·8	133·6	334·3	1,017·3	28·0

[1] See note 2, Table 30, above.

Subsection 5.—Power and Fuel.

Power.—The power equipment installed in manufacturing establishments is a very good barometer of the industrial development of Canada, inasmuch as the production is increasingly dependent on the power equipment. Increases and decreases in productive capacity, measured in horse-power, are not the result of temporary fluctuations in costs and values in the same manner as capital investments, values of products, etc. Power equipment will not reflect temporary depressions, but over a period of several years will indicate industrial growth or decline.

Central electric stations, which generate electricity for both lighting and power purposes, are treated in Table **32** separately from the other groups of industries. Internal combustion engines include all gasolene engines, natural, coal and producer gas engines, and diesel and semi-diesel or other engines which produce power by burning the fuel in the cylinder.

Comparisons with the data for 1929 show an increase of 533,714 h.p. or 8·1 p.c. in 1930 in the total primary power equipment installed in all manufacturing establishments, including central electric stations, by far the largest increase amounting to 475,118 h.p., being in the central electric stations, there being a decrease in primary power installation in some of the other manufacturing groups due to the replacement of steam equipment by electrical equipment operated by purchased power. The water-power development of central electric stations increased by 425,182 h.p., while steam power installed increased by 46,349 h.p. and internal combustion engines by 3,587 h.p. Provinces with large water-power developments usually show the greatest primary power increases. During the year 1930, Ontario led with an increase of 147,737 h.p., Quebec came second with an increase of 123,796 h.p., British Columbia third with an increase of 99,216 h.p., Nova Scotia fourth with an increase of 46,633 h.p. and Manitoba fifth with an increase of 43,463 h.p. In the utilization of hydraulic power, Quebec exceeded Ontario for the first time in 1925. In 1927, Quebec exceeded Ontario or any other province in the total of installed primary power from all sources and has been the leading province since then, largely owing to its extensive water-power resources, 92 p.c. of its primary power in 1930 being derived from water.

The rapid increase in the development of power in Canada and in its utilization in manufacturing industries is illustrated by the summary figures for the years 1921 to 1930 in Table **32**. The table is divided into two parts, the first showing manufacturing industries exclusive of central electric stations and the second showing central electric stations only. The abundance of readily available water power in many parts of Canada, facilitating the development of low-cost hydro-electric power, has no doubt played a large part in this rapid growth. Of the total primary power increase of 3,968,295 h.p., inclusive of central electric stations, in the 9 years, no less than 3,493,464 h.p. or 89 p.c. was in water power. However, some sections of Canada are not so well provided with water-power resources and chiefly in such sections primary power derived from steam engines and turbines and internal combustion engines has also increased rapidly during the period covered. In the provinces of Prince Edward Island, Nova Scotia, Saskatchewan and Alberta, primary power produced from fuels exceeded that from water in 1930. The total installation of electric motors increased 1,983,185 h.p. or 196 p.c. in the 9 years covered, by far the greatest part of this increase being in motors operated by power purchased from central electric stations.

32.—Totals for Canada, of Power Installed in the Manufacturing Industries other than Central Electric Stations and in Central Electric Stations, 1921-30, with Details by Provinces and Groups of Industries for 1930.

MANUFACTURING INDUSTRIES (EXCLUSIVE OF CENTRAL ELECTRIC STATIONS).

Province and Group.	Primary Power.				Electric Motors.			Total Power Equipment Employed.
	Steam Engines and Turbines.	Internal Combustion Engines.	Hydraulic Turbines and Water Wheels.	Total Primary Power.	Operated by Purchased Power.	Operated by Power Generated by Establishments.	Total Electric Motors.	
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
Totals, 1921...	**495,534**	**37,696**	**492,508**	**1,025,738**	-	-	**1,014,216**	-
Totals, 1922...	**554,141**	**70,271**	**578,795**	**1,203,207**	-	-	**1,162,649**	-
Totals, 1923...	**554,191**	**46,829**	**587,191**	**1,188,211**	**958,692**	**357,136**	**1,315,828**	**2,146,903**
Totals, 1924...	**652,913**	**54,250**	**575,189**	**1,282,352**	**1,256,183**	**398,001**	**1,654,184**	**2,538,535**
Totals, 1925...	**686,425**	**57,247**	**596,738**	**1,340,410**	**1,547,754**	**434,678**	**1,982,432**	**2,888,164**
Totals, 1926...	**704,158**	**56,128**	**603,628**	**1,363,914**	**1,770,334**	**392,322**	**2,162,656**	**3,134,248**
Totals, 1927...	**718,157**	**57,143**	**587,595**	**1,362,895**	**1,924,687**	**386,555**	**2,311,242**	**3,287,582**
Totals, 1928...	**736,996**	**58,806**	**657,253**	**1,453,055**	**2,139,129**	**457,565**	**2,596,694**	**3,592,184**
Totals, 1929...	**768,141**	**60,654**	**645,500**	**1,474,295**	**2,393,684**	**495,854**	**2,889,538**	**3,867,979**
Totals, 1930...	**799,041**	**65,630**	**668,220**	**1,532,891**	**2,518,853**	**478,548**	**2,997,401**	**4,051,744**
PROVINCE, 1930.								
P.E. Island........	1,522	381	1,335	3,238	631	400	1,031	3,869
Nova Scotia.......	91,972	3,866	9,931	105,769	62,924	37,873	100,797	168,693
New Brunswick...	62,852	3,287	13,950	80,089	47,248	33,456	80,704	127,337
Quebec............	181,128	8,238	282,858	472,224	1,026,413	56,151	1,082,564	1,498,637
Ontario............	290,265	37,710	259,885	587,860	1,025,354	254,714	1,280,068	1,613,214
Manitoba..........	13,018	1,209	30	14,257	101,267	582	101,849	115,524
Saskatchewan.....	10,883	1,478	1	12,362	16,453	89	16,542	28,815
Alberta...........	21,434	2,283	132	23,849	41,884	3,523	45,407	65,733
British Columbia and Yukon......	125,967	7,178	100,098	233,243	196,679	91,760	288,439	429,922
GROUP OF INDUSTRIES, 1930.								
Vegetable products	59,990	13,109	40,987	114,086	199,441	26,404	225,845	313,527
Animal products..	23,507	5,835	2,016	31,358	74,475	2,510	76,985	105,833
Textiles...........	23,092	1,246	32,175	56,513	114,811	30,720	145,531	171,324
Wood and paper...	465,766	17,451	505,374	988,591	1,137,924	262,866	1,400,790	2,126,515
Iron and its products............	151,354	21,604	4,438	177,396	399,213	113,779	512,992	576,609
Non-ferrous metals	20,048	410	69,460	89,918	311,899	20,191	332,090	401,817
Non-metallic minerals............	30,841	5,156	5,411	41,408	172,509	14,925	187,434	213,917
Chemicals.........	17,130	336	8,328	25,794	61,588	7,153	68,741	87,382
Miscellaneous Industries.......	7,313	483	31	7,827	46,993	-	46,993	54,820

32.—Totals for Canada of Power Installed in the Manufacturing Industries other than Central Electric Stations and in Central Electric Stations, 1921-1930, with Details by Provinces and Groups of Industries for 1930—concluded.

CENTRAL ELECTRIC STATIONS.

Province.	Primary Power.				Electric Motors.			Total Power Equipment Employed.
	Steam Engines and Turbines.	Internal Combustion Engines.	Hydraulic Turbines and Water Wheels.	Total Primary Power.	Operated by Purchased Power.	Operated by Power Generated by Establishments.	Total Electric Motors.	
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
Totals, 1921...	**269,191**	**15,871**	**1,826,357**	**2,111,419**	–	–	–	**2,111,419**
Totals, 1922...	**279,615**	**16,751**	**2,112,289**	**2,408,655**	–	–	–	**2,408,655**
Totals, 1923...	**273,679**	**17,191**	**2,282,547**	**2,573,417**	–	–	–	**2,573,417**
Totals, 1924...	**291,354**	**18,241**	**2,707,957**	**3,017,552**	–	–	–	**3,017,552**
Totals, 1925...	**306,491**	**20,188**	**3,416,018**	**3,742,697**	–	–	–	**3,742,697**
Totals, 1926...	**314,377**	**22,426**	**3,609,385**	**3,946,188**	–	–	–	**3,946,188**
Totals, 1927...	**320,774**	**22,610**	**3,975,012**	**4,318,396**	–	–	–	**4,318,396**
Totals, 1928...	**316,311**	**25,058**	**4,445,531**	**4,786,900**	–	–	–	**4,786,910**
Totals, 1929...	**347,641**	**30,875**	**4,718,927**	**5,097,443**	–	–	–	**5,097,443**
Totals, 1930...	**393,990**	**34,462**	**5,144,109**	**5,572,561**	–	–	–	**5,572,561**
PROVINCE, 1930.								
P.E. Island........	2,598	920	464	3,982	–	–	–	3,982
Nova Scotia.......	38,706	1,184	80,192	120,082	–	–	–	120,082
New Brunswick...	22,530	1,170	85,485	109,185	–	–	–	109,185
Quebec............	33,996	1,363	2,316,007	2,351,366	–	–	–	2,351,366
Ontario...........	39,883	1,355	1,729,731	1,770,969	–	–	–	1,770,969
Manitoba..........	33,767	2,704	352,925	389,396	–	–	–	389,396
Saskatchewan.....	100,855	17,589	–	118,444	–	–	–	118,444
Alberta............	75,512	4,266	69,520	149,298	–	–	–	149,298
B. C. and Yukon..	46,143	3,911	509,785	559,839	–	–	–	559,839

Fuel.—The fuel used in industrial establishments in 1930 included 6,385,728 tons of bituminous coal, valued at $34,073,553 constituting 60.3 p. c. of the total fuel cost. The other chief fuels in order of value were: fuel oil, comprising 13.9 p. c., gas (principally natural gas) 10.5 p. c., wood 4.04 p. c., coke 3.4 p. c. and anthracite coal 3.3 p. c. Out of a fuel account of over $56,000,000, Ontario expended $27,044,693 or 47.8 p. c. of the total. The manufacturing concerns of Quebec expended $15,165,061, those of British Columbia $3,495,758 and those of Nova Scotia $2,916,336.

The groups of industries in which fuel was most extensively used in 1930 were: non-metallic minerals, $13,103,000; wood and paper, $12,671,000; iron and steel, $9,650,000; and vegetable products, $6,524,000. Fuel is used quite generally throughout the industrial field for the generation of power by means of internal combustion and steam engines. The most important industries where heat is applied directly to materials to transform them or to facilitate their manipulation are foundries and machine shops, blast furnaces and steel mills, smelting plants, brick-, tile-, lime- and cement-making, petroleum refining and the glass industry.

In such industries as the manufacture of coke and gas the coal used as a material which enters into the actual composition of the product is not treated as a fuel but as a raw material and is not, therefore, included in the figures of Table **33.**

The total annual expenditure on fuel increased by $4,877,835 or 9·4 p.c. in the 9 years from 1921 to 1930, covered by the summary figures in Table **33.** During this period prices of fuels generally have declined. Thus there has been an increase of 56 p.c. in the quantity of bituminous coal used while the value has decreased 2 p.c. The fuels which have shown the greatest proportionate increases are gas and oil.

33.—Total Fuel Used in the Manufacturing Industries of Canada, 1921-30, with Details by Provinces and Groups, 1930.

Province and Group.	Bituminous Coal.		Anthracite Coal.	Coke.	Oil.	Wood.	Gas.	Total.[1]
	Quantity.	Value.						
	tons	$	$	$	$	$	$	$
Totals, 1921...	**4,103,071**	**34,752,681**	**2,915,752**	**2,497,400**	**5,417,800**	–	–	**51,640,912**
Totals, 1922...	**4,101,463**	**29,914,585**	**3,616,185**	**3,299,016**	**5,649,071**	**2,085,444**	**1,616,802**	**48,920,505**
Totals, 1923...	**5,338,446**	**38,283,135**	**4,614,239**	**3,238,257**	**6,241,692**	**2,514,157**	**1,904,058**	**58,736,938**
Totals, 1924...	**5,518,255**	**34,438,554**	**4,642,654**	**2,250,232**	**5,780,752**	**2,595,064**	**4,711,186**	**57,068,214**
Totals, 1925...	**5,902,197**	**34,034,531**	**2,564,489**	**5,045,239**	**7,246,961**	**2,700,979**	**3,570,180**	**57,818,701**
Totals, 1926...	**6,409,227**	**36,723,359**	**2,266,935**	**4,176,584**	**7,371,769**	**2,645,505**	**4,233,073**	**59,695,997**
Totals, 1927...	**6,470,803**	**36,053,827**	**2,435,720**	**3,890,378**	**7,220,529**	**2,492,495**	**5,272,735**	**60,106,218**
Totals, 1928...	**6,639,736**	**37,871,736**	**2,070,989**	**1,819,347**	**7,300,552**	**2,439,104**	**5,434,805**	**59,761,267**
Totals, 1929...	**7,062,234**	**39,315,723**	**1,986,332**	**2,354,542**	**8,778,491**	**2,693,629**	**6,214,847**	**64,425,489**
Totals, 1930...	**6,385,728**	**34,073,553**	**1,892,789**	**1,927,214**	**7,847,513**	**2,282,402**	**5,953,767**	**56,518,747**
PROVINCE, 1930.								
P.E. Island........	13,275	85,178	261	4,098	12,012	9,654	–	114,793
Nova Scotia.......	384,061	1,727,211	27,728	117,132	505,757	59,016	451,402	2,916,336
New Brunswick...	288,442	1,438,892	9,976	31,014	53,826	179,974	18,115	1,743,591
Quebec............	1,762,586	10,333,944	903,867	431,431	2,076,804	609,664	561,167	15,165,061
Ontario............	3,233,589	16,680,588	848,237	1,075,206	2,862,161	807,985	4,016,919	27,044,693
Manitoba..........	183,102	1,334,264	87,328	60,199	246,882	175,536	126,022	2,521,758
Saskatchewan.....	141,225	805,370	9,574	83,761	477,953	40,941	174,592	2,003,206
Alberta............	157,840	504,971	1,298	22,628	118,665	24,435	455,155	1,513,551
British Columbia and Yukon......	221,608	1,163,135	4,520	101,745	1,493,453	375,197	150,395	3,495,758
GROUP OF INDUSTRIES, 1930.								
Vegetable products	668,012	3,310,852	404,731	460,488	799,292	443,304	692,618	6,523,849
Animal products...	334,824	1,941,888	56,494	20,397	193,267	460,089	73,343	3,040,109
Textiles...........	444,591	2,714,980	241,542	48,865	83,808	48,254	90,402	3,377,826
Wood and paper...	1,734,543	9,702,828	717,710	43,176	1,020,964	667,562	190,102	12,671,180
Iron and steel......	1,034,434	4,864,989	210,846	375,478	1,717,569	66,025	1,942,182	9,649,582
Non-ferrous metals	375,951	1,930,751	78,950	208,023	1,042,471	93,343	181,975	3,577,638
Non-metallic minerals.............	1,201,067	6,615,310	91,850	693,458	2,339,380	454,463	2,716,859	13,103,310
Chemicals.........	249,797	1,262,988	58,802	62,739	84,926	15,221	22,795	1,572,930
Miscellaneous industries........	44,711	284,202	18,670	14,590	52,196	7,044	21,595	407,444
Central electric stations..........	297,798	1,444,765	13,194	–	513,640	27,097	21,896	2,594,879

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[1] Includes other kinds of fuel which, in 1930, were as follows: lignite coal, $1,296,160; gasolene, $420,036; other fuels, $825,313.

Section 5.—Manufacturing Industries in Cities and Towns.

The prosperity of most of the cities and towns of Canada, especially in the East, is intimately connected with their manufacturing industries, which provide employment for a large proportion of their gainfully employed population. In the West the cities are more largely distributing centres, though manufactures are rapidly increasing there also.

Table **34**, indicating the extent to which the manufacturing industries of Canada are concentrated in urban centres, shows by provinces the proportion of the gross manufacturing production which is produced in cities and towns having a gross production of over $1,000,000 each. In the more highly industrialized provinces of Ontario and Quebec such cities and towns account for about 88 p.c. of the total, while in British Columbia and Prince Edward Island, where sawmilling, fish-packing, and dairying are leading industries, the proportion falls to 56 p.c. or less. In the Prairie Provinces manufacturing is largely confined to a few large urban centres.

34.—Cities and Towns with a Gross Manufacturing Production of over $1,000,000 each, Number of Establishments and Total Gross Production in such Cities and Towns as a Percentage of the Grand Total, by Provinces, 1930.

NOTE—Statistics published in this table are in some cases higher than the figures published in Table **36**, since, in the table below are included statistics of towns with less than three establishments and production of over $1,000,000 each. It was not possible to publish this information in Table **36** without disclosing the operations of individual establishments.

Province.	Cities and Towns with a Gross Production of over $1,000,000 each.	Establishments Reporting in Cities and Towns Producing over $1,000,000 each.	Total Production in Cities and Towns Producing over $1,000,000 each.	Total Production in each Province.	Production in Cities and Towns as a Percentage of Total Production in each Province.
	No.	No.	$	$	p.c.
Prince Edward Island	1	35	2,097,576	4,254,966	49·3
Nova Scotia	10	286	68,789,291	85,802,921	80·0
New Brunswick	9	273	45,487,896	63,468,262	71·7
Quebec	55	2,938	875,429,366	1,022,280,687	85·6
Ontario	111	6,059	1,539,442,139	1,713,025,322	90·0
Manitoba	7	627	131,481,877	142,424,990	92·3
Saskatchewan	4	197	53,511,357	62,276,766	85·9
Alberta	5	354	81,168,277	94,314,782	86·1
British Columbia	13	1,025	135,863,448	241,121,932	56·4
Canada	**215**	**11,794**	**2,933,271,227**	**3,428,970,628**	**85·5**

The five chief manufacturing cities of Canada are Montreal, Toronto, Hamilton, Winnipeg and Vancouver. Statistics showing the trend of production in these cities during the latest nine years for which the figures are available are given in Table **35**. According to the census of 1921, Hamilton was proportionately the most largely dependent of these cities upon manufacturing industries. About 45 p.c. of its gainfully employed population was employed in manufacturing, as compared with 30 p.c. in Montreal and Toronto, and 17 p.c. in Winnipeg and Vancouver.

Twenty-one other important cities with a gross production of manufactured goods of over $20,000,000 each in 1930 were as follows, in descending order of the value of their products: London, East Windsor, Kitchener, Oshawa, Walkerville, Calgary, Quebec, Three Rivers, Ottawa, Peterborough, Brantford, Sarnia, Edmonton, Niagara Falls, Regina, Shawinigan Falls, Montreal East, New Toronto, St. Boniface, La Salle and Sault Ste. Marie. Statistics of manufactures of cities and towns with a gross production of $200,000 and over and with three or more establishments are given for 1930 in Table **36.**

35.—Principal Statistics of the Manufacturing Industries of Five Leading Manufacturing Cities of Canada, 1922-30.

City and Year.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
Montreal 1922	1,461	350,839,911	78,100	81,829,111	198,697,089	389,098,176
1923	1,451	473,624,425	85,603	93,943,718	226,198,441	459,254,656
1924	1,560	469,354,640	86,648	94,725,516	224,134,382	444,852,084
1925	1,661	517,209,355	90,584	98,441,694	233,287,050	460,252,857
1926	1,736	543,557,131	96,141	109,364,475	275,714,382	556,236,407
1927	1,823	552,788,702	98,353	113,797,512	259,104,230	540,267,591
1928	1,834	481,181,947	101,668	119,226,844	273,015,114	554,311,571
1929	1,818	495,081,057	104,330	125,501,945	293,927,832	598,832,894
1930	1,825	485,332,181	98,905	115,753,191	250,718,415	532,404,756
Toronto 1922	1,811	392,469,184	78,833	92,930,846	205,568,765	394,065,052
1923	1,933	389,772,678	82,267	97,417,033	210,786,422	409,829,557
1924	1,928	410,244,068	80,001	96,554,310	213,493,889	401,367,127
1925	1,957	429,165,022	82,728	100,769,782	246,399,340	447,098,824
1926	2,013	451,233,965	86,439	107,734,568	270,290,114	489,522,114
1927	2,092	475,475,308	92,238	115,556,907	270,275,071	520,066,313
1928	2,221	505,207,658	100,034	125,579,599	293,830,796	565,444,323
1929	2,236	549,328,334	102,406	133,722,929	304,208,614	593,253,569
1930	2,320	524,161,983	94,745	121,221,281	253,974,080	521,540,080
Hamilton 1922	437	143,168,098	23,476	26,256,146	50,844,910	100,280,131
1923	436	170,378,119	25,797	31,399,136	77,140,899	141,097,732
1924	427	170,993,755	23,772	28,513,251	56,884,010	118,591,000
1925	415	166,294,590	23,619	27,977,960	62,102,984	122,207,849
1926	417	172,345,587	27,087	33,244,170	74,066,846	146,037,029
1927	422	179,328,754	29,210	36,984,470	72,757,263	152,107,454
1928	426	201,584,803	30,787	40,276,968	79,114,898	166,262,355
1929	416	221,427,642	35,375	47,535,648	94,404,240	197,949,081
1930	439	214,227,256	31,053	39,661,672	75,785,992	166,910,535
Winnipeg 1922	436	46,251,208	10,679	13,858,116	36,766,668	66,925,392
1923	424	70,788,577	11,542	14,704,566	38,172,282	70,529,471
1924	411	87,489,506	11,934	15,395,262	40,837,275	74,755,670
1925	409	89,688,323	14,346	18,390,797	42,388,504	79,614,829
1926	446	96,801,995	15,474	20,086,607	46,501,703	87,696,243
1927	468	108,635,882	16,759	21,290,167	48,921,620	95,590,961
1928	491	115,678,092	18,340	23,994,480	35,275,785	105,456,065
1929	501	125,321,028	19,150	25,216,832	55,116,644	109,320,746
1930	519	123,781,546	19,749	25,844,816	45,720,081	94,407,201
Vancouver 1922	485	75,030,953	10,598	10,579,482	35,507,418	63,172,964
1923	507	80,053,568	11,400	13,815,995	40,518,790	71,221,905
1924	498	93,699,451	13,417	16,920,959	43,691,647	77,860,759
1925	507	102,105,028	13,334	16,384,973	42,020,970	75,823,721
1926	523	106,624,727	14,781	18,347,299	46,120,382	84,831,423
1927	556	116,754,995	14,897	19,254,035	47,290,240	87,754,347
1928	620	123,029,880	16,013	20,263,435	49,597,035	94,131,608
1929	639	129,078,372	16,663	21,882,312	50,933,163	99,646,413
1930	681	128,684,902	16,068	20,874,524	45,730,258	90,975,000

36.—Statistics of Manufactures of Municipalities with a Gross Production of $200,000 or over, and with Three or more Establishments, 1930.

City or Town.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
Prince Edward Island—						
Charlottetown	35	2,195,412	522	511,982	1,056,887	2,097,576
Summerside	14	388,842	111	66,296	144,100	306,739
Nova Scotia—						
Halifax	100	21,049,113	3,986	4,568,220	6,071,349	16,067,662
Dartmouth	14	14,169,884	1,039	1,452,438	11,656,859	15,397,621
Sydney	31	26,808,824	2,238	2,729,247	6,479,682	14,507,166
Trenton	3	9,826,450	947	1,186,825	4,443,504	6,789,798
Liverpool	11	18,650,501	707	1,074,553	1,499,663	5,027,063
Truro	29	4,851,735	966	751,770	1,799,772	3,505,910
Amherst	25	5,281,530	723	718,906	1,050,489	2,412,708
New Glasgow	30	2,757,006	673	672,764	780,441	2,131,893
Yarmouth	30	2,464,272	496	365,833	818,159	1,753,253
Windsor	13	2,579,431	285	236,320	663,816	1,196,217
Lunenburg	14	618,377	263	228,050	349,274	759,900
Bridgewater	17	934,106	184	160,919	389,548	630,056
Pictou	10	462,012	297	152,231	338,451	615,379
Glace Bay	8	1,229,069	75	92,243	28,832	516,058
Lockport	6	418,274	132	79,237	307,996	482,013
Stellarton	11	799,478	82	69,714	122,103	480,205
Port Hawkesbury	5	582,024	153	92,788	235,547	428,963
North Sydney	12	223,614	122	108,682	245,271	417,819
Oxford	12	344,087	129	93,118	200,072	362,728
Shelburne	19	306,980	171	137,907	171,573	349,852
Digby	7	543,362	80	66,586	196,290	339,268
Clarks Harbour	9	39,823	79	20,656	275,103	338,877
Hantsport	5	441,230	138	101,160	99,932	307,435
Middleton	7	288,862	74	45,785	181,078	280,703
Stewiacke	3	211,418	87	65,031	146,000	263,164
Wolfville	6	151,523	38	38,718	96,917	234,151
Bridgetown	8	617,599	80	62,778	114,845	207,907
Mahone Bay	12	346,781	115	69,331	68,715	200,059
New Brunswick—						
Saint John	126	24,885,946	3,513	3,606,363	12,355,168	19,883,665
Moncton	42	8,169,132	2,332	2,813,500	3,882,502	7,897,453
Edmundston	10	16,482,184	588	652,973	2,056,505	4,647,405
St. Stephen	18	2,396,491	576	505,187	1,369,042	2,686,641
Bathurst	17	9,324,781	528	698,597	1,123,181	2,498,097
Fredericton	31	2,966,301	590	605,460	1,040,881	2,120,858
Sackville	16	1,883,364	471	404,197	320,367	1,144,621
Grand Falls	11	13,945,629	135	117,822	107,460	1,067,975
Sussex	13	580,744	198	160,265	451,506	927,872
Milltown	3	2,063,620	480	388,448	542,621	874,757
Chatham	10	3,016,119	248	205,201	450,187	864,006
Newcastle	15	2,078,774	250	179,173	449,207	733,772
Campbellton	13	1,181,380	206	225,286	375,068	714,173
St. George	8	532,724	138	110,662	108,506	277,678
Woodstock	17	646,931	103	84,119	64,724	269,107
Quebec—						
Montreal	1,825	485,332,181	98,905	115,753,191	250,718,415	532,404,756
Quebec	243	68,153,767	9,824	9,349,274	15,470,992	38,314,617
Three Rivers	59	80,842,254	5,896	6,296,342	17,142,507	37,972,620
Shawinigan Falls	23	178,967,616	3,573	4,745,684	4,531,949	24,510,936
Montreal East	6	34,739,735	1,816	2,757,205	12,723,156	22,184,054
LaSalle	7	27,934,981	1,319	1,703,325	7,112,880	21,170,230
Lachine	32	30,950,769	3,368	5,690,264	7,137,771	17,387,918
Sherbrooke	68	24,152,604	4,353	4,319,521	6,766,771	15,946,699
Granby	31	10,208,353	2,923	2,101,466	4,745,358	11,385,686
Drummondville	18	20,271,132	2,674	2,532,494	3,860,825	9,794,346
Hull	38	12,580,178	1,924	2,106,182	3,660,170	8,960,340
St. Hyacinthe	45	10,858,961	2,793	1,970,688	4,588,840	8,290,331
St. Jean	41	10,965,758	2,868	2,784,367	3,491,877	7,826,768
St. Jérôme	30	8,014,702	2,153	1,728,771	2,301,879	7,399,204
Port Alfred	3	34,454,311	712	1,024,395	3,221,945	6,827,468
Magog	16	6,670,130	1,345	1,125,795	4,519,277	6,790,091
Valleyfield	27	12,817,791	2,673	1,683,749	2,911,120	4,963,241
La Tuque	10	13,353,866	896	1,307,459	1,909,887	4,870,225
Westmount	13	3,692,368	891	1,250,799	1,510,961	4,451,247
Kenogami	5	15,918,460	796	1,077,902	1,838,162	4,440,336

36.—Statistics of Manufactures of Municipalities with a Gross Production of $200,000 or over, and with Three or more Establishments, 1930—continued.

City or Town.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
Quebec—continued.						
Cap de la Madeleine	12	19,942,788	818	798,517	1,896,647	4,363,631
Grand'Mère	16	25,768,133	1,091	1,263,315	1,602,192	4,357,996
St. Pierre	11	7,905,163	1,097	1,566,300	1,255,840	4,216,884
Donnacona	3	9,881,506	607	92,930	973,536	3,721,032
Montmorency	3	4,026,789	1,283	1,000,446	1,987,907	3,633,847
St. Joseph d'Alma	8	14,601,580	499	783,703	1,064,051	3,474,423
Victoriaville	23	2,939,892	1,099	940,166	1,465,885	3,042,584
East Angus	7	8,234,287	615	704,220	2,259,609	2,997,816
Chicoutimi	27	14,738,255	557	542,996	470,044	2,840,766
Sorel	17	2,775,946	1,508	1,490,138	936,592	2,819,058
Belœil	11	4,938,586	254	339,458	1,073,727	2,808,724
Joliette	41	2,584,290	755	589,145	1,012,904	2,551,007
Brownsburg	4	3,128,143	496	503,113	804,522	2,503,413
Beauharnois	7	6,281,370	509	490,669	671,078	2,443,797
Lauzon	6	2,963,468	447	526,161	589,144	2,351,517
Verdun	18	3,348,445	938	866,224	1,058,466	2,338,966
Cowansville	11	2,576,164	612	574,822	1,106,275	2,218,524
Outremont	7	1,745,460	580	725,358	972,062	2,199,207
Windsor	8	6,495,234	562	694,456	927,079	2,107,416
Coaticook	20	2,481,410	624	377,837	983,580	1,738,923
Farnham	10	1,399,760	499	362,884	933,466	1,595,949
Asbestos	10	620,539	166	194,333	1,087,605	1,542,478
Louiseville	11	1,299,994	536	304,559	1,030,035	1,502,791
Delson	4	1,620,058	393	413,576	379,806	1,408,971
Longueuil	11	3,089,280	230	302,426	478,978	1,406,713
Chandler	4	3,206,622	425	408,937	668,487	1,333,100
Buckingham	13	16,725,387	459	314,443	569,722	1,317,790
Berthier	14	6,987,387	366	329,135	641,687	1,238,168
Rimouski	10	3,501,163	306	285,135	493,347	1,205,447
Montmagny	14	2,298,524	442	371,370	328,153	1,178,978
St. Rémi	12	508,472	85	64,077	869,064	1,116,794
Portneuf	10	1,463,346	207	169,721	502,002	1,032,849
Jonquière	11	1,857,925	215	283,378	542,100	1,024,707
St. Georges Est	10	417,132	168	161,642	630,348	974,675
Plessisville	14	886,864	291	244,575	486,641	941,228
Acton Vale	10	649,412	311	172,453	615,191	916,949
Marieville	14	732,672	283	242,615	586,708	852,167
Iberville	9	415,651	222	376,690	170,771	851,698
Rock Island	12	1,934,903	297	258,305	319,939	838,393
Loretteville	18	769,460	378	265,934	420,407	825,044
Laprairie	7	7,513,748	372	379,483	55,005	803,189
Rivière du Loup	17	2,077,926	291	314,234	256,372	772,396
St. Raymond	73	1,032,634	225	160,901	322,802	749,623
St. Laurent	8	938,506	269	283,858	358,386	739,941
Thurso	9	1,276,076	132	152,566	554,398	738,604
Bedford	7	927,307	325	251,056	83,887	704,720
Waterloo	10	841,252	244	192,887	266,262	667,232
Lennoxville	6	1,179,229	85	114,219	401,754	632,039
Calumet	4	919,824	134	133,156	374,776	604,722
Pont Rouge	13	781,360	105	85,504	272,115	534,851
Lac au Saumon	3	1,316,060	203	97,832	311,328	496,485
Warwick	12	551,558	146	105,568	291,681	494,707
St. Thérèse	14	995,071	159	119,219	189,935	490,999
Terrebonne	10	967,000	221	174,109	245,593	482,440
Ste. Marie	13	276,542	215	108,482	287,261	471,125
Compton	4	167,602	151	92,701	167,882	464,759
Chambly Canton	3	923,746	121	129,937	132,811	454,978
St. Benoit Labre	15	274,641	155	116,755	233,842	425,876
Contrecœur	6	294,456	156	109,786	231,408	398,205
Lévis	15	624,018	178	147,888	135,610	396,731
Mont Joli	7	271,595	109	62,240	212,991	386,746
Nicolet	11	340,649	161	105,998	210,938	382,312
Huntingdon	9	296,055	82	47,778	236,519	378,079
Mégantic	9	664,263	112	96,414	149,008	374,387
St. Lambert	9	910,929	136	126,926	126,171	372,127
Scotstown	4	281,631	134	111,559	133,182	345,132
New Glasgow	5	203,735	39	13,217	168,770	335,863
Shawville	9	110,083	37	27,500	243,859	330,341
L'Assomption	7	387,761	117	98,681	184,476	323,106
Lachute	8	722,117	89	70,547	182,034	322,672
St. Tite	15	164,292	93	60,179	196,079	284,634
Danville	10	307,088	85	72,275	182,378	276,198

36.—Statistics of Manufactures of Municipalities with a Gross Production of $200,000 or over, and with Three or more Establishments, 1930—continued.

City or Town.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
Quebec—concluded.						
Disraeli	9	60,721	82	43,520	170,688	265,184
Beauceville	10	175,135	109	60,743	128,848	257,963
Beauport	6	108,146	53	44,191	138,070	250,316
Sutton	8	275,795	80	58,483	148,761	249,948
Beebe Plain	5	192,391	72	54,025	151,919	243,790
St. Marc des Carrières	6	78,668	99	74,203	35,761	235,942
Mont Laurier	8	174,394	43	35,132	160,512	233,808
Ste. Anne de Bellevue	6	719,504	79	83,213	48,023	233,671
St. Félicien	23	242,869	93	28,421	160,965	225,743
Papineauville	4	38,941	15	9,550	181,695	216,425
Thetford Mines	15	412,552	100	87,078	81,211	215,385
Ontario—						
Toronto	2,320	524,161,983	94,745	121,221,281	253,974,080	521,540,080
Hamilton	439	214,227,256	31,053	39,661,672	75,785,992	166,910,535
London	228	46,838,810	9,366	11,014,370	17,786,502	45,497,024
East Windsor	14	41,428,765	6,004	9,778,461	25,652,099	44,123,658
Kitchener	135	38,911,220	8,374	8,928,433	18,739,948	41,893,483
Oshawa	43	32,505,290	5,381	4,522,593	25,474,132	41,382,402
Walkerville	62	38,022,931	4,694	6,946,923	22,951,007	39,586,056
Ottawa	208	57,295,811	8,255	10.249,938	14,257,043	33,104,464
Peterborough	88	26,310,208	5,310	5,545,738	17,056,759	32,021,081
Brantford	105	63,571,322	6,775	7,440,750	13,941,043	29,049,118
Sarnia	42	26,128,121	3,202	4,616,369	20,427,450	27,936,512
Niagara Falls	62	45,745,986	2,852	4,098.130	8,005,870	27,152,123
New Toronto	13	24,644,287	2,648	3,990,871	10,935,934	22,089,673
Sault Ste. Marie	46	68,346,064	2,255	3,744,842	9,360,324	20,311,921
St. Catharines	104	20,767,205	4,244	4,811,394	8,206,088	19,022,105
Welland	39	22,539,035	3,061	3,502,252	9,118,885	18,038,726
Windsor	135	27,503,583	3,290	5,091,488	5,625,993	16,882,358
Cornwall	41	25,253,452	3,673	3,547,423	5,756,701	15,797,802
Guelph	88	16,974,035	4,042	3,972,366	6,116,189	13,790.268
Port Colborne	18	11,881,252	721	1,062,752	10,518,090	13,584,724
Galt	77	16,270,332	4,023	4,156,855	5,196,005	12,896,121
Fort William	41	29,331,639	1,287	1,778,956	5,273,460	12,553,998
Leaside	7	12,660,369	1,614	2,391,193	7,706,879	12,308,440
Thorold	18	28,494,101	1,514	2,410,563	4,852,749	11,876,495
Chatham	56	14,248,051	2,008	2,315,524	7,070,269	11,841,496
Stratford	59	11,176,325	2,982	3,650,679	5,997,548	11,622,122
Woodstock	58	12,028,624	2,507	2,484,403	5,400,717	10,895,478
Keewatin	3	4,046,212	279	366,333	7,920,388	9,469,367
Iroquois Falls	3	26,443,546	1,098	2,003,383	2,339,126	8,849.496
Brockville	31	7,149,654	979	1,101,561	5,913,710	8,848,870
Fergus	14	1,706,971	743	836,125	2,401,319	8,528,966
Wallaceburg	17	7,507,275	1,042	1,274,776	5,012,340	7,816,053
Kapuskasing	9	43,293,984	1,193	1,731,579	2,575,951	7,568.916
Waterloo	41	12,560,315	1,360	1,493,747	2,775,310	7,563,607
Kingston	57	13,824,851	1,632	1,996,160	3,400,460	7,132,752
Simcoe	28	6,234,950	835	704,243	3,441,633	6,051,825
Kenora	18	18,672,539	554	675,265	3,544,823	5,964,086
Leamington	15	4,564,527	558	545,306	3,462,536	5,855,218
Belleville	46	11,203,325	1,363	1,355,002	1,461,046	5,759,034
Port Arthur	23	20,147,935	1,082	1,560,249	1,932,779	5,520,947
Owen Sound	54	7,046,547	1,712	1,708,819	2,440,504	5,268,119
Preston	33	6,649,871	1,633	1,678,344	1,997,180	4,873,204
Goderich	20	2,505,270	387	366,048	3,578,615	4,829,488
Newmarket	16	2,392,513	640	680,923	1,697,664	4,751,312
Pembroke	35	6,105,322	1,243	1,075,936	2,540,441	4,629,874
Fort Francis	13	14,415,339	614	941,643	1,738,331	4,586,141
St. Thomas	45	4,130,686	1,121	1,108,480	2,135,807	4,367,172
Weston	13	4,351,951	941	1,121,168	2,112,835	3,713,710
St. Marys	19	5,306,861	441	563,464	1,737,821	3,707,118
Merritton	9	5,240,072	503	679,734	1,398,678	3,437,993
Paris	19	5,018,077	1,049	902,661	1,601,022	3,412,835
Renfrew	20	3,940,919	660	689,162	1,848,232	3,402,980
Ingersoll	23	4,397,315	710	796,654	1,862,988	3,222,741
Sandwich	12	8,095,060	665	987,332	365,540	3,152,398
Cardinal	8	3,773,291	270	365,498	1,925,158	3,123,742
Bowmanville	16	3,558,084	520	556,551	1,300,210	3,121,374
Orillia	36	5,777,700	921	979,466	1,332,541	3,095,909
Chippewa	4	1,887,952	248	383,480	794,382	3,063,689
Sudbury	29	3,257,811	509	626,703	1,346,827	2,910,291

36.—Statistics of Manufactures of Municipalities with a Gross Production of $200,000 or over, and with Three or more Establishments, 1930—continued.

City or Town.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
Ontario—continued						
Hawkesbury	9	4,702,959	470	592,910	1,701,860	2,905,452
Brampton	24	2,701,322	892	901,548	1,304,297	2,867,152
Dundas	20	4,592,784	740	963,494	1,558,294	2,848,085
Acton	15	3,423,514	526	536,214	1,733,429	2,804,746
Perth	19	3,884,407	688	786,718	1,165,045	2,785,986
Elmira	14	2,540,283	698	607,721	947,847	2,782,312
Petrolia	13	2,256,001	178	239,162	1,754,555	2,768,333
Midland	19	3,744,312	488	460,482	1,796,841	2,684,968
Trenton	28	4,020,679	621	588,677	1,469,006	2,680,087
Amherstburg	10	14,017,756	320	462,422	512,711	2,601,409
Georgetown	14	2,420,365	502	500,569	1,552,411	2,545,332
Hespeler	14	5,900,100	1,006	896,611	1,101,826	2,538,139
Huntsville	12	3,095,649	305	288,462	1,587,959	2,496,007
Bridgeburg	21	2,280,892	351	669,711	961,743	2,424,511
Aylmer	11	2,680,538	270	270,530	1,239,394	2,393,822
Hanover	16	3,764,194	783	714,213	1,177,694	2,392,217
Cobourg	30	2,444,172	470	433,656	851,070	2,171,496
Dunnville	20	2,648,446	720	696,727	946,229	2,109,138
Aurora	8	1,318,326	365	378,618	1,299,639	1,992,365
Chesterville	7	1,000,049	193	237,820	1,145,831	1,939,139
Carleton Place	15	2,009,130	539	569,422	641,572	1,849,329
Smiths Falls	19	4,820,774	570	641,442	751,096	1,837,140
Port Credit	5	3,014,180	230	267,226	1,021,350	1,826,913
Blind River	6	7,709,175	290	388,960	1,173,125	1,820,481
Napanee	19	1,445,969	307	325,710	877,357	1,769,482
Port Hope	28	2,981,971	553	593,100	556,721	1,745,135
Collingwood	25	4,669,437	476	495,277	900,501	1,717,989
Barrie	18	1,624,134	312	367,721	1,053,379	1,723,918
Lindsay	36	2,309,127	433	415,899	887,031	1,704,278
Tillsonburg	20	1,801,671	358	327,531	966,388	1,634,719
Ayr	8	1,822,592	126	125,529	637,160	1,621,596
Listowel	18	1,139,124	439	333,579	807,062	1,522,975
Oakville	16	1,398,624	367	434,569	800,899	1,498,378
North Bay	25	1,776,424	317	357,032	685,465	1,438,646
Strathroy	16	1,483,781	275	270,287	808,454	1,375,596
Kincardine	13	1,583,034	420	377,295	698,555	1,359,030
Grimsby	12	1,331,068	426	298,019	580,618	1,308,297
Gananoque	21	2,798,595	348	410,233	617,872	1,285,703
Arnprior	16	1,691,773	297	277,423	535,887	1,253,990
Dryden	9	5,636,424	312	329,355	489,473	1,253,737
Tavistock	10	473,610	182	155,941	967,887	1,225,718
Lakefield	10	3,307,237	191	227,438	144,653	1,191,244
Caledonia	10	2,038,466	214	239,695	562,171	1,154,269
Meaford	14	1,348,923	302	255,674	728,781	1,144,441
Cache Bay	3	1,307,681	191	223,382	791,947	1,101,894
Sturgeon Falls	8	7,979,243	282	392,281	555,991	1,100,054
Prescott	16	1,036,043	283	238,866	488,519	1,099,630
Picton	24	1,259,698	294	172,752	660,888	1,086,634
Chesley	14	1,018,331	374	354,147	504,118	1,033,869
Woodbridge	5	684,650	163	178,185	579,045	965,049
Milton	18	3,038,489	342	353,960	225,933	962,390
Walkerton	20	1,777,905	280	245,769	488,756	961,075
Bloomfield	11	1,141,288	272	120,859	646,090	946,306
Burlington	9	1,233,914	209	209,444	530,907	940,871
Gravenhurst	10	1,459,817	302	301,879	302,744	936,465
Wingham	13	758,104	226	208,533	541,696	924,228
Elora	8	1,471,490	244	297,423	270,136	905,116
New Liskeard	15	1,602,309	263	272,998	544,349	878,839
Humberstone	9	636,858	205	192,656	426,445	875,921
Brighton	18	1,018,339	220	111,982	477,222	874,996
Copper Cliff	4	8,654,717	131	135,053	202,957	874,125
Campbellford	16	1,290,208	283	245,541	564,560	869,331
Wellington	8	1,008,411	155	100,230	488,201	784,782
Penetanguishene	15	1,164,918	316	336,259	289,668	778,035
Norwich	12	398,559	97	99,865	538,064	772,443
Almonte	17	1,189,601	317	240,186	420,974	768,837
Tilbury	8	902,527	213	154,002	400,362	735,402
Orangeville	13	857,978	175	146,023	427,351	691,948
Whitby	8	862,923	236	230,749	287,475	674,532
Mount Forest	16	716,412	168	147,902	372,486	653,695
Sioux Lookout	8	796,829	118	93,863	390,892	643,959
Clinton	12	660,242	142	134,413	373,396	643,147

36.—Statistics of Manufactures of Municipalities with a Gross Production of $200,000 or over and with Three or more Establishments, 1930—continued.

City or Town.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
Ontario—concluded	No.	$	No.	$	$	$
Bracebridge	17	1,611,495	180	164,917	363,265	639,130
New Hamburg	13	816,684	176	154,799	315,464	625,048
Deseronto	11	535,411	155	74,035	418,133	605,798
Frankford	11	1,718,406	191	69,473	365,427	602,885
Forest	11	615,351	144	97,118	342,103	602,710
Exeter	11	652,231	94	75,864	401,385	601,240
Alexandria	16	622,932	136	126,635	310,867	599,674
Streetsville	10	507,886	103	134,923	250,587	590,621
Port Elgin	9	670,228	181	188,479	252,665	567,739
Tweed	11	479,425	162	149,858	260,248	542,258
Southampton	8	914,387	197	187,593	257,302	532,390
Durham	10	502,485	190	159,476	317,103	523,273
Dresden	12	594,616	130	115,669	288,333	520,543
Harriston	11	567,906	135	118,187	271,265	506,125
Seaforth	14	450,765	140	130,540	243,025	500,176
Burks Falls	6	737,984	223	183,094	226,749	492,220
Jarvis	5	163,393	30	30,834	382,207	481,765
Kingsville	11	1,206,530	103	90,931	227,061	472,788
Waterford	7	486,884	130	72,319	279,146	455,038
Haileybury	5	1,079,995	94	100,586	179,893	433,812
Ridgetown	15	549,092	95	70,008	252,244	431,833
Waterdown	8	540,092	107	138,484	93.971	429,202
South River	7	662,870	143	102,803	218,881	420,963
Dutton	9	133,659	33	28,571	328,082	416,916
Essex	10	704,745	104	88,682	191,022	413,625
West Lorne	7	468,491	85	60,018	263,634	412,044
Wiarton	11	402,304	98	83,892	269,042	405,859
Mitchell	9	430,218	83	71,802	244,007	395,325
Mimico	6	712,781	84	70,664	13,738	385,064
Teeswater	8	231,673	38	34,697	257,296	381,179
Port Dover	10	536.195	89	61,515	213,045	360,332
Hagersville	6	117,316	18	17,092	242,397	355,472
Markham	5	229,246	31	33,743	257,934	350,295
Port Dalhousie	4	369,400	91	83,053	137,309	340,049
Milverton	10	331,514	75	59,716	197,047	327,204
Lucknow	11	332,530	79	63,347	191,883	321,923
Palmerston	9	164,019	29	24,259	227,165	305,845
Timmins	15	607,410	97	95,074	139,718	293,694
Casselman	11	338.650	69	48,593	200,418	291,379
Neustadt	4	229,768	63	38,388	145.556	279,558
Brussels	7	102,215	17	12,156	217,489	272,726
Kemptville	9	285,177	57	50,165	152,078	266,623
Tara	7	67,984	18	15,151	211,890	262,071
Thessalon	8	472,526	116	92,382	122,278	249,567
Stayner	8	101,355	27	20,144	180,844	244,972
Paisley	9	110,341	28	21,158	173,634	240,702
Parry Sound	17	476,441	86	47,453	87,213	237,962
Delhi	8	753,230	58	40,508	164,082	235,538
Arthur	4	60,943	8	9,782	188,344	233,995
Port Perry	10	187,591	39	27,745	143,485	233,404
Niagara	5	358,966	51	43,134	104,260	225,377
Fort Erie	5	530,915	43	54,311	74,779	223,844
Fonthill	4	344,602	79	31,093	122,780	222,036
Belle River	5	413,220	57	51,655	87,396	216,410
Iroquois	7	195,167	57	54,429	98,964	215,398
Blenheim	8	321,600	75	33,044	106,036	212,830
Beamsville	10	139,343	53	45,405	129,700	212,534
Uxbridge	10	124,613	25	16,338	144,860	209,687
Winchester	11	118,394	42	24,560	135,233	206,083
Stirling	11	124,771	46	29,370	133,798	203,210
Markdale	5	70,826	31	16,648	159,336	202,749
Manitoba—						
Winnipeg	519	123,781,546	19,749	25,844,816	45,720,081	94,407,201
St. Boniface	40	10,092,734	1,491	1,857,246	15,709,540	21,985,750
Transcona	4	6,853,170	2,020	3,005,126	3,472,685	6,827,784
Brandon	36	3,657,861	433	559,757	1,901.801	3,266,441
Portage la Prairie	14	779,854	149	182,762	1,823.634	2,568,671
Selkirk	7	1,990,436	394	434,973	338,477	1,401,460
The Pas	7	1,212,794	271	318,734	447,755	1.024,570
Dauphin	12	494,301	87	88,230	275,232	506,735
Neepawa	6	222,630	49	49,284	186,174	308,825
Shoal Lake	4	84,615	17	16,672	151,850	205,219

36.—Statistics of Manufactures of Municipalities with a Gross Production of $200,000 or over, and with Three or more Establishments, 1930.—concluded

City or Town.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
Saskatchewan—						
Regina	84	35,486,916	2,758	4,039,789	14,729,011	25,961,543
Saskatoon	64	9,529,233	1,402	2,001,260	6,956,714	12,741,166
Moosejaw	31	8,928,115	831	1,136,668	7,451,757	11,421,584
Prince Albert	18	2,386,089	403	481,824	1,721,032	3,387,064
North Battleford	13	656,352	114	114,200	324,821	676,740
Swift Current	16	730,057	109	133,463	244,178	642,815
Yorkton	11	449,585	71	62,917	232,414	477,714
Estevan	9	915,500	108	115,427	134,832	374,325
Mewburn	11	450,923	69	84,888	118,958	331,447
Melville	3	107,314	17	24,014	222,737	292,084
Humboldt	4	107,005	14	17,318	177,882	266,580
Alberta—						
Calgary	153	35,701,054	5,287	7,029,185	22,970,988	39,230,983
Edmonton	153	24,760,067	4,606	5,937,286	15,584,973	27,660,417
Medicine Hat	19	8,298,909	622	796,054	5,952,916	8,765,979
Lethbridge	26	3,093,428	392	525,945	1,388,103	3,956,623
Raymond	3	2,575,139	140	172,452	1,110,826	1,554,275
Redcliffe	6	1,983,062	276	342,575	266,147	735,785
Wetaskiwin	8	241,765	29	31,900	246,921	326,501
Red Deer	8	194,205	34	49,117	161,451	305,131
Camrose	9	213,507	32	43,861	159,170	266,319
Didsbury	7	192,952	30	30,778	168,631	245,919
Ponoka	7	69,624	14	17,439	156,004	216,721
Clairmore	7	360,317	52	70,987	110,620	211,140
British Columbia—						
Vancouver	681	128,684,902	16,068	20,874,524	45,730,258	90,975,000
New Westminster	62	15,602,513	2,329	2,878,242	7,963,106	13,811,847
Victoria	145	20,811,902	2,962	3,798,638	4,175,295	12,252,589
North Vancouver	18	5,800,483	716	1,043,525	1,459,745	3,078,305
Prince Rupert	19	3,782,789	431	670,532	1,692,842	2,733,202
Rossland	5	10,812,023	410	596,470	20,619	2,436,695
Port Alberni	7	1,518,043	372	466,015	1,156,965	2,432,318
Nelson	25	2,227,135	362	434,773	683,962	1,564,905
Nanaimo	25	1,545,711	441	405,989	577,397	1,499,069
Fernie	9	6,524,950	198	252,261	484,352	1,403,063
Abbotsford	5	572,555	233	266,623	923,592	1,328,756
Kelowna	20	1,160,224	392	272,106	642,396	1,243,628
Port Moody	4	1,512,457	259	277,960	500,566	1,104,071
Duncan	11	729,975	271	322,967	357,883	862,132
Vernon	15	2,100,657	201	180,812	365,884	809,136
Kamloops	15	926,988	273	198,691	322,043	738,860
Mission	9	471,010	98	81,639	267,125	404,876
Cranbrook	11	428,376	82	116,870	146,626	400,316
Courtenay	7	1,241,385	67	85,901	124,833	377,793
Trail	9	200,113	58	81,891	71,548	371,752
Merritt	9	316,293	79	97,961	151,053	288,342
Chilliwack	10	162,821	105	64,114	104,307	226,613

CHAPTER XV.—CONSTRUCTION.

Construction is the most conspicuous example of a great industry carried on in almost complete dependence on a local demand. The building industry is not only the most widespread in its operation, it is one which expands most rapidly in good times when it attracts great numbers of general and casual workmen—a characteristic which explains the high rate of unemployment from which the industry periodically suffers. Again, apart from the effect of cyclical fluctuations of general business conditions, the construction industry is decidedly seasonal, although new types of construction and mechanical improvements are making it possible to work more steadily on all branches of construction the year round. Conditions in the industry are being transformed on account of the increasing substitution of reinforced concrete for wood and brick construction. Nevertheless, in the winter there is a serious contraction, especially in outside operations, while in the other seasons the contractors employ a much larger number of men, casually engaged, than can be retained throughout the year. A considerable number of the men are in no sense skilled artisans and the supply of unskilled men is generally in excess of the demand.

Relation of Construction Industry to General Business Conditions.—Statistics showing activity in construction are of particular interest both to those engaged in the industry itself and to those concerned with the supplying of its raw materials, such as lumber, steel, cement, paint, glass and hardware. All of these latter industries are prosperous when the construction industry is active, and depressed when it is at a standstill; again, the effects of their activity and depression are felt throughout the whole field of industry, so that the current conditions in the construction industry react powerfully upon the whole economic life of the nation. Thus, in the period between 1909 and 1913, construction, mainly financed with borrowed money, contributed in large measure to produce the "boom" of those years.

During the war period the industry was at a low ebb, except for the construction of munition plants, but after the War the housing shortage was a serious problem, and considerable building was undertaken in spite of the high cost of materials and skilled labour, as shown in Table **4**. The urgent requirements due to the practical suspension of the industry during the War were fully met in the post-war years, but the peak of the inflation cycle in 1929 is reflected in the highest value of construction contracts on record, aggregating $576,651,800, exceeding 1928 by no less than $104,619,200 and the former peak year, 1912, by $113,568,800. In 1932, the total value of construction contracts awarded had declined to $132,872,400, which was $182,609,600 or 57·9 p.c less than in 1931, and represented a decline of $443,779,400 or 77 p.c. from the peak in 1929. (See Table **2.**)

Construction in Transportation and Public Utility Industries.—The expenditure for construction by the transportation and public utility systems is incorporated in their general maintenance and structural accounts. The maintenance of way and structures account of the steam railways in 1931 totalled $66,109,521 as compared with $78,035,587 in 1930, while investments in the road bed and equipment of new lines in 1931 totalled $22,350,280 and in additions and betterments on old lines, $42,804,071. There were 305 miles of new lines opened for operation during 1931, 427·7 miles completed but not opened for traffic, and 592·9 miles under construction. Total track mileage in 1931 was 56,908 as compared with 56,642 in 1930, a net increase of 266 miles. The expenditure of electric railways on maintenance of way and structures account decreased from $3,977,114 in 1930 to $3,291,490 in 1931. There was a net decrease of $5,909,416 during 1931 in the capital investment of electric railways.

As for the telephone systems of Canada, the pole line mileage increased from 222,113 in 1930 to 222,196 in 1931, and the wire mileage from 4,790,224 to 4,985,076 in the same period. The property and equipment account was $319,101,191 in 1930 and $333,055,119 in 1931.

The pole line mileage of the telegraph systems increased from 52,824 in 1930 to 53,228 in 1931, and the wire mileage increased from 367,721 to 368,583. The telegraph and cable companies reported new construction valued at $1,089,413 and alterations and repair work costing $1,179,376, or a total expenditure for construction of $2,268,789 for the year.

Contracts Awarded.—A record of contracts awarded during the years 1911-32, as compiled by MacLean Building Reports, Ltd., is given in Table **1**. The aggregate for 1932 is 77 p.c. less than for the record year 1929. It is the lowest figure since 1918, when new construction was largely suspended on account of the War. Immigration was exceptionally great in 1912 and an extensive building program was necessary to care for the rapidly growing population; railway construction was also very active. In 1928 the high level was largely accounted for by residential building and industrial contracts were considerably ahead of 1927. Although residential construction declined in 1929, the tremendous increase in engineering construction and the significant advances in building for business purposes combined to make the record total. While construction operations of all types declined in 1930 when compared with 1929, the declines were most pronounced in the industrial, residential and business types, whereas engineering construction continued very active and was nearly double that of any year prior to 1929. It will be observed from Table **2** that construction for all purposes has declined greatly since then to the very low level recorded in 1932.

1.—Summary of the Value of Construction Contracts Awarded in Canada, 1911-32, as Compiled by MacLean Building Reports, Ltd.

Year.	Value of Construction Contracts.	Year.	Value of Construction Contracts.
	$		$
1911	345,425,000	1922	331,843,800
1912	463,083,000	1923	314,254,300
1913	384,157,000	1924	276,261,100
1914	241,952,000	1925	297,973,000
1915	83,916,000	1926	372,947,900
1916	99,311,000	1927	418,951,600
1917	84,841,000	1928	472,032,600
1918	99,842,000	1929	576,651,800
1919	190,028,000	1930	456,999,600
1920	255,605,000	1931	315,482,000
1921	240,133,300	1932	132,872,400

2.—Construction Contracts Awarded in Canada, 1927-32, by Provinces and Types of Construction, as Compiled by MacLean Building Reports, Ltd.

Distribution.	1927.	1928.	1929.	1930.	1931.	1932.
PROVINCE.	$	$	$	$	$	$
Prince Edward Island	421,100	559,000	627,300	1,120,500	186,800	1,071,500
Nova Scotia	5,469,300	27,784,000	12,744,500	7,238,500	6,923,800	4,009,500
New Brunswick	3,597,200	7,825,000	6,806,500	11,067,600	9,756,800	4,258,500
Quebec	133,182,600	144,185,000	187,771,600	154,672,000	106,125,700	52,525,300
Ontario	196,159,000	188,351,700	215,773,100	175,459,600	125,452,300	49,291,800
Manitoba	29,939,900	23,995,300	38,156,500	22,010,900	13,797,800	4,503,500
Saskatchewan	11,337,600	22,127,100	34,184,300	27,361,300	9,200,000	2,705,200
Alberta	7,507,300	17,909,700	29,159,600	25,081,700	14,334,700	5,948,200
British Columbia	31,337,600	39,295,800	51,428,400	32,987,500	29,704,100	8,558,900
Canada	**418,951,600**	**472,032,600**	**576,651,800**	**456,999,600**	**315,482,000**	**132,872,400**
TYPE OF CONSTRUCTION.						
Apartments	25,981,800	36,720,500	22,527,200	15,330,300	16,202,200	1,536,000
Residences	98,957,800	102,445,800	106,374,100	77,961,200	65,482,100	27,356,600
Totals, Residential	**124,939,600**	**139,166,300**	**128,901,300**	**93,291,500**	**81,684,300**	**28,892,600**
Churches	12,052,700	8,327,500	8,867,800	7,265,600	7,744,600	2,736,800
Public garages	7,354,700	10,889,100	12,915,100	7,049,700	3,420,000	2,945,400
Hospitals	8,897,200	9,596,300	8,983,700	14,636,200	12,142,500	3,985,900
Hotels and clubs	30,598,700	15,486,400	20,110,500	13,806,700	2,881,100	1,436,600
Office buildings	40,752,900	34,120,900	37,465,100	26,529,600	3,575,200	3,192,600
Public buildings	8,195,200	8,744,700	19,062,600	16,804,600	16,803,200	8,174,300
Schools	22,244,000	20,907,400	22,482,800	35,079,800	17,852,700	6,749,900
Stores	11,831,900	27,448,000	27,353,900	10,006,100	9,035,900	4,742,100
Theatres	1,519,500	3,085,000	3,074,800	2,356,100	1,308,900	663,100
Warehouses	19,982,000	31,621,300	29,835,400	17,569,300	6,410,200	4,772,500
Totals, Business	**163,428,800**	**170,226,600**	**190,161,700**	**151,103,700**	**81,174,300**	**39,399,200**
Totals, Industrial	**39,988,900**	**63,300,000**	**62,968,800**	**31,520,000**	**14,816,000**	**7,820,400**
Bridges	23,468,900	7,360,200	11,218,500	11,333,700	16,064,600	7,675,500
Dams and wharves	6,565,300	8,297,900	24,721,300	10,281,600	3,943,300	2,777,600
Sewers and water-mains	9,624,700	10,455,800	17,552,200	28,680,800	25,620,400	10,638,000
Roads and streets	24,382,800	29,412,500	41,690,800	40,490,200	41,035,800	20,019,500
General engineering	26,552,600	43,812,400	99,437,200	90,298,100	51,143,300	15,649,600
Totals, Engineering	**90,594,300**	**99,338,800**	**194,620,000**	**181,084,400**	**137,807,400**	**56,760,200**

Building Permits.—The estimated value of construction in 61 cities of Canada, as indicated by their building permits, is shown for the years 1927 to 1932 inclusive in Table 3. These cities had in 1931 about 36 p.c. of the population of Canada, while their 1932 building permits aggregated $42,319,397 or 31·8 p.c. of the total contracts awarded, as shown in Table 1. In Table 3, the 35 cities for which statistics of building permits are available since 1910 are indicated by an asterisk (*), and the totals for these cities are given beneath the totals for the larger group.

Table 4 shows the value of the building permits issued by 35 cities in the years 1910-32. The average weighted index numbers of wholesale prices of building materials since 1913 are given together with index numbers, since 1921, of employment in the construction industries as reported by employers, both these indexes have been compiled by the Dominion Bureau of Statistics. The average index numbers of wages in the building trades since 1910 as compiled by the Department of Labour are also given. These indexes show as far as possible the fluctuations in building costs with their effect upon construction work and employment. Attempts have been made to determine the relative proportion of material and wage costs in general building, but representative data could not be obtained. The reduction in the cost of building operations has probably been much more than is indicated by these figures. Index numbers of wages in the building trades are based chiefly on union rates in cities, and the types of construction which have been stimulated have been those where the higher paid trades have not been in great demand. The reduction in common labour costs has been proportionately greater than in the trades.

Owing to the increasing use of the automobile and other means of rapid transportation, a growing percentage of those who work in the cities reside outside the municipal boundaries. Hence arises, in part, the necessity for an extension of the record of building permits to include such suburban areas as the York Townships in the case of Toronto, and North Vancouver in the case of Vancouver. South Vancouver and Point Grey were annexed to Vancouver as from Jan. 1, 1929.

The construction contracts in 1932 as shown in Table **2** decreased by 58 p.c. compared with 1931 and the building permits of 61 cities in Table **3** decreased by more than 62 p.c.

3.—Value of Building Permits Taken Out in 61 Cities for the calendar years 1927-32.

NOTE.—Asterisks indicate the 35 original cities, statistics for which are available since 1910.

Province and City.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
P.E.I., Charlottetown	[1]	[1]	**20,000**	**158,000**	[1]	**587,000**
Nova Scotia	**1,840,647**	**3,078,176**	**5,748,282**	**3,564,302**	**3,174,980**	**1,109,753**
*Halifax	1,537,899	2,808,357	5,209,245	3,188,345	2,964,985	933,519
New Glasgow	10,850	64,515	305,370	141,250	107,165	35,890
*Sydney	291,898	205,304	233,667	234,707	102,830	140,344
New Brunswick	**1,365,065**	**1,262,266**	**2,037,934**	**3,034,614**	**1,783,462**	**648,434**
Fredericton	14,779	148,015	23,500	482,000	140,295	18,500
*Moncton	736,110	270,813	768,698	456,827	385,850	184,395
*Saint John	614,176	843,438	1,245,736	2,095,787	1,257,317	445,539
Quebec	**58,320,532**	**49,933,504**	**57,984,175**	**46,224,208**	**37,605,584**	**12,467,878**
*Montreal-*Maisonneuve	45,200,842	36,347,901	46,065,924	37,504,590	31,876,676	10,557,438
*Quebec	6,360,165	5,710,144	5,684,183	4,912,257	4,049,875	1,179,465
Shawinigan Falls	347,835	1,163,581	770,618	468,540	55,065	107,230
*Sherbrooke	689,930	1,128,233	755,240	812,150	676,350	229,300
*Three Rivers	2,332,500	1,681,450	1,488,065	851,730	242,030	108,075
*Westmount	3,389,260	3,902,195	3,220,145	1,674,941	705,588	286,370
Ontario	**79,883,344**	**104,777,566**	**95,055,827**	**69,042,946**	**44,371,578**	**16,887,761**
Belleville	670,010	239,323	533,730	312,360	221,900	100,705
*Brantford	571,599	802,528	473,387	1,034,957	506,677	170,844
Chatham	575,087	780,020	813,560	821,258	201,365	56,215
*Fort William	1,209,450	2,062,000	1,759,000	1,227,300	451,000	294,100
Galt	181,023	378,581	527,315	264,901	239,022	88,768

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[1] No information received.

3.—Value of Building Permits Taken Out in 61 Cities for the calendar years 1927-32 —concluded.

NOTE.—Asterisks indicate the 35 original cities, statistics for which are available since 1910.

Province and City.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Ontario—concluded.						
*Guelph	493,169	462,815	607,377	371,351	221,082	152,885
*Hamilton	3.837,150	6,342,100	7,008,320	6,291,100	5,026,050	1,424,300
*Kingston	420,467	678,203	908,900	1,056,986	548,199	349,039
*Kitchener	1,272,632	1,524,625	1,645,351	1,344,232	627,853	363,048
*London	2,814,950	2,561,705	2,408,900	2,744,735	1,746,900	567,690
Niagara Falls	1,517,510	2,056,415	905,510	483,678	158,018	186,266
Oshawa	5,255,188	3,015,070	1,478,090	195,470	146,375	41,314
*Ottawa	6,446,045	5,421,085	3,403,333	6,295.275	3,154,000	1,549,515
Owen Sound	330,350	262,375	529,850	132,000	81,975	22,415
*Peterborough	624,295	625,577	618,278	797,895	278,526	192,919
*Port Arthur	3,473,736	5,292,545	555,945	995,487	341,975	284,437
*Stratford	221,254	224,412	354,849	414,410	164.535	50,068
*St. Catharines	1,147,286	1,249,141	1,432,392	610,067	563,626	221,566
*St. Thomas	92,682	362,732	172,190	180,327	139,640	44,955
Sarnia	1,064,415	814,586	1,021,962	633,899	171,818	62,404
Sault Ste. Marie	329,461	402,419	782,059	589,773	436.147	142,680
*Toronto	31,274,876	51,607,188	47,698,654	32,130,589	22,002,099	7,862,693
York Townships	6,041,635	8,210,380	9,824,273	6,240,998	5,948,037	1,598,357
Welland	400,364	309,866	301,500	196,125	209,726	67,650
*Windsor	4,930,832	4,518,723	5,571,849	2,250,130	436,507	848,377
East Windsor	1,054,531	758,315	561,382	424,233	22,136	44,043
Riverside	624,340	496,460	383,225	153,920	29,165	2,525
Sandwich	1,323,140	762,775	856,190	183,775	21,130	12,050
Walkerville	1,527,000	2,108,000	1,631,000	472,000	130,000	17,000
Woodstock	158,867	447,602	287,456	193,715	146,095	86,933
Manitoba	**8,561,122**	**11,846,635**	**12,007,695**	**7,631,620**	**4,953,908**	**2,381,433**
*Brandon	230,252	428,130	404,342	197,245	286,613	33,088
St. Boniface	761,570	871,105	553,103	780,625	270,695	218,945
*Winnipeg	7,569,300	10,547,400	11,050,250	6,653,750	4,396,600	2,129,400
Saskatchewan	**7,928,574**	**13,449,826**	**16,950,228**	**9,544,287**	**3,790,002**	**2,374,440**
*Moose Jaw	1,230,489	1,074,078	1,025,474	1,058,303	473,047	392,542
*Regina	3,482,090	6,619,206	10,022,631	2,971,544	1,598,440	277,069
*Saskatoon	3,215,995	5,756,542	5,902,123	5,514,440	1,718,515	1,704,829
Alberta	**5,398,691**	**10,292,579**	**17,953,321**	**9,460,834**	**4,730,465**	**2,243,718**
*Calgary	2,330,131	6,302,142	11,417,144	4,054,364	1,944,039	917,868
*Edmonton	2,568,565	3,374,971	5,670,185	4,300,935	1,377,175	1,093,045
Lethbridge	438,684	498,590	559,392	984,830	1,294,056	192,150
Medicine Hat	61,311	116,876	306,600	120,705	115,195	40,655
British Columbia	**21,315,767**	**24,465,163**	**27,187,087**	**17,718,514**	**11,812,866**	**3,618,980**
Kamloops	252,488	128,761	241,247	205,235	133,642	49,435
Nanaimo	211,065	45,269	112,640	117,053	45,350	56,269
*New Westminster	1,082,114	1,928,324	1,011,629	553,990	580,321	137,712
Prince Rupert	252,940	176,804	93,648	148,695	156,493	54,230
*Vancouver[1]	16,669,680	19,445,288	21,572,727	14,645,206	10,066,425	2,854,206
North Vancouver	322,739	912,780	292,515	150,073	94,025	77,455
*Victoria	2,524,741	1,827,937	3,862,681	1,898,262	736,610	389,673
Totals—61 Cities	**184,613,742**	**219,105,715**	**234,944,549**	**166,379,325**	**112,222,845**	**42,319,397**
***Totals—35 Cities**	**154,904,047**	**187,269,237**	**211,228,814**	**151,324,214**	**101,647,955**	**38,370,313**

[1] South Vancouver and Point Grey were annexed to Vancouver city as from Jan. 1,1929. Their permits in earlier years have been included in the respective Vancouver totals.

4.—Value of Building Permits Issued by 35 Cities in the calendar years 1910-32 and Index Numbers of the Construction Industries.

Year.	Value.	Average Index Numbers of—		
		Wholesale Prices of Building Materials.	Wages in the Building Trades.	Employment as Reported by Employers in Construction Industries.
	$	(1913=100.)	(1913=100.)	(1926=100.)
1910	100,357,546	–	86·9	–
1911	138,170,390	–	90·2	–
1912	185,233,449	–	96·0	–
1913	153,662,842	100·0	100·0	–
1914	96,780,981	93·8	100·8	–
1915	33,566,749	90·3	101·5	–
1916	39,724,466	103·8	102·4	–
1917	33,936,426	130·7	109·9	–
1918	36,838,270	150·5	125·9	–
1919	77,113,413	175·0	148·2	–
1920	100,679,839	214·9	180·9	–
1921	94,508,164	183·2	170·5	71·1
1922	122,655,581	162·2	162·5	76·7
1923	111,174,325	167·0	166·4	80·9
1924	105,070,284	159·1	169·1	80·3
1925	101,021,798	153·5	170·4	84·9
1926	131,048,721	149·2	172·1	100·0
1927	154,904,047	143·4	179·3	109·0
1928	187,269,237	145·3	185·6	118·8
1929	211,228,814	147·7	197·5	129·7
1930	151,324,214	135·5	203·2	129·8
1931	101,647,955	122·2	195·7	131·4
1932	38,370,313	115·2	178·2	86·0

CHAPTER XVI.—EXTERNAL TRADE.

This chapter commences with an historical sketch of Canadian external trade, the Canadian tariff, and recent developments in external trade, followed by a brief account of the Commercial Intelligence Service. Thereafter is to be found a treatment of statistics of external trade under ten subordinate headings: historical statistics of Canadian trade; general analysis of current import and export trade; trade with the United Kingdom and the British Empire; trade with the United States and other foreign countries; geographical distribution of Canadian trade by continents and countries; principal commodities imported and exported; trade in raw and manufactured products; Canada's position in international trade; main historical tables and tables showing current trends (Tables **1** to **21**); and comparison of the volumes of imports and exports (Table **22**). The chapter is finally brought to a close with sections on the tourist trade of Canada, and on Canada's balance of international payments in recent years.

Section 1.—The Development of Tariffs.

An outline of the development of tariffs as affecting Canada naturally falls into two divisions: first, a historical sketch showing the various phases of Canadian trade which have influenced tariff development; and second, the present tariff conditions under which Canadian trade is carried on.

Subsection 1.—Historical Sketch of External Trade and Tariffs.

In the early history of the American continent each of the European nations establishing settlements in the New World endeavoured to monopolize the commerce of its colonies, prohibited the ships of other nations from resorting to them and prohibited its colonials from importing European goods from other countries, generally granting them, however, preferential treatment in its own market. In these circumstances the colonial wars in America were carried on by Governments permeated by the mercantile spirit, for "ships, colonies and commerce". Owing to this fact, wars resulting in the transfer of colonies from one European power to another involved great economic as well as political changes in the community so transferred. The traders who had previously controlled the trade between the mother country and its colony found their occupations gone, while new traders from the conquering State arrived to take over the import and export trade, which thereafter flowed in new channels, perhaps no more artificial than those which had previously existed.

Throughout the earlier part of the French *régime* in Canada, the foreign trade of the colony was in the hands of the monopolistic chartered companies, of which the Company of One Hundred Associates was the most notable. When its monopoly was cancelled in 1663, the external trade of Canada still remained a preserve of the merchants of Old France. Upon the conquest of the country by the British, the French merchants, who had their offices in Quebec and Montreal, for the most part returned to France, and the trade of the colony fell into the hands of the traders from England, Scotland and New England, who had flocked into the country at the heels of the invading armies. Some of their descendants are still among the leading figures in Canadian import and export trade.

For the first sixty years of British rule, Canadian commerce was carried on almost exclusively with or through the United Kingdom, the merchants of New England complaining, after the American Revolution, of being shut out from the Canadian trade. The geographical juxtaposition of the United States to British North America was, however, a factor which could not permanently be ignored, and smuggling became more and more prevalent as settlement extended westward along the International Boundary. In 1822 Great Britain made considerable concessions to United States traders in respect of the Canadian trade. In 1846 she abolished the preferential treatment which she had given to Canadian wheat, and in 1860 all vestige of preference to colonial products disappeared from the British tariff. As a consequence, the colonies which, like Canada, Nova Scotia and New Brunswick, were by this time enjoying responsible government, could not any longer be refused the right to control their own commercial policy—a fact which was emphasized in an important report prepared in 1859 by the then Minister of Finance, (Sir) A. T. Galt, and forwarded to the British Government. This report declared that the responsibility of the Canadian Government must be to the Canadian people, more especially in matters of taxation (the greater part of the revenue being raised by customs duties), and that the Canadian Government must affirm the right of the Canadian Parliament to adjust the taxation of the people in the way it deemed best, even if this should happen to meet with the disapproval of the British Ministry. This doctrine remained unchallenged by the British Government and, coming at a time when all important parties in Great Britain had accepted free trade as a *fait accompli*, it facilitated the setting up in Canada of a protective tariff, designed to secure the establishment in Canada of manufacturing industries, at a time when British opinion desired that the colonies should concentrate their attention on the production of food and raw materials and import from Great Britain the manufactured commodities which they required.

The Abolition of Preference and the Reciprocity Treaty of 1854.—The abolition of the British preference on Canadian wheat in 1846 brought about a depression in the flour-milling industry of Montreal and an ephemeral agitation for union with the United States. The effects of the repeal of the preference were, however, mitigated in 1849 by the repeal of the Navigation Acts and the consequent opening of the carrying trade between Canada and the United Kingdom to the shipping of the world. Meanwhile, the abandonment of protection in the Mother Country led to the initiation of negotiations for a reciprocity treaty with the United States. A treaty for the free exchange of natural products between them and the British North American colonies was negotiated in 1854, and became effective on Mar. 16, 1855. From its operation the Canadian farmer and fisherman derived considerable benefit, more especially during the period of the Civil War, when prices in the United States were particularly high. Partly as a consequence of the friction between Great Britain and the United States during the Civil War period and partly because the new Canadian tariff of 1859 shut out the manufactured goods of the United States, the treaty was denounced by the United States at the end of the ten-year period for which it had been negotiated and ceased to operate 12 months later on Mar. 17, 1866. The denunciation of the treaty had a considerable effect in bringing about the confederation of the British North American colonies, which it was hoped would to a great extent consume each other's products.

Tariff Policy since Confederation.—The immediate effect of Confederation was to abolish the tariff barriers which existed between the provinces entering the Dominion. As the area of Canada increased until, except for Newfoundland and

Labrador, it became conterminous with British North America, the area of internal free trade was thereby extended, while protection against outside competition was generally maintained. However, the protective tariff of the old province of Canada, adopted in 1859 with a prevailing rate of 20 p.c., was replaced in 1866 by a tariff assimilated to the revenue tariffs of the Maritime Provinces, with the rates of duties on the great bulk of manufactured commodities reduced from 20 and 25 p.c. to 15 p.c. Later on, the world-wide depression which commenced in 1873, and the consequent falling off in a revenue based upon trade, necessitated an increase of the general rate to 17½ p.c., with a 20 p.c. rate on certain luxuries. Even this increase failed to fill the treasury.

In 1879, after the people had declared for a protective policy in the general election of 1878, the duties on imported manufactured goods were considerably increased, the rate on goods "not otherwise provided" being raised from 17½ p.c. to 20 p.c., the rates on cotton goods from 17½ p.c. to rates, specific and *ad valorem*, equivalent, on the importations of 1881, to 30 p.c., while the duties on woollens were practically doubled. The rate on furniture and clocks was increased to 35 p.c.; on carriages, glassware, wall-paper and silks, to 30 p.c.; on boots and shoes, buttons, rubber goods and woodenware, to 25 p.c. Pig iron, previously free, now paid $2 a ton, and the duty on iron billets, bars and rods was increased from 5 p.c. to 10 and 17½ p.c., while manufactured iron and steel products and machinery were given 25 to 35 p.c. protection. Throughout the '80's the general trend of the minor revisions made in the tariff was still upwards but in the '90's a downward tendency became manifest. In 1891 the duty on raw sugar was repealed, and in 1894 material reductions were made on agricultural implements, and minor readjustments on cottons and woollens. This period was also marked by the thorough-going extension of protection to the iron and steel industry, both by customs duties and bounties.

In the tariff revision of 1897, the duties on Indian corn, binder twine, barbed wire, pig iron, flour and refined sugar were reduced or abolished, while the bounties on domestic pig iron were not reduced but in certain cases increased. But the most distinctive feature of the tariff revision of 1897 was the adoption of what was called a "reciprocal" tariff, one-eighth lower than the general. This "reciprocal" tariff was at once applied to the United Kingdom, and afterwards to New South Wales and to British India, while Belgium and Germany, in virtue of their trade treaties with Great Britain, were also admitted to the benefits of the "reciprocal" tariff, together with Argentina, Austria-Hungary, Bolivia, Colombia, Denmark, Persia, Russia, Sweden, Switzerland, Tunis and Venezuela, on account of most-favoured-nation treaties between these countries and Great Britain, also France and her colonies, in consequence of the Franco-Canadian treaty of 1893. A little later the "reciprocal" tariff was also extended to the Netherlands, Japan, Siberia, Morocco, Salvador, South African Republic, Tonga and Spain, under most-favoured-nation treaties between these countries and the United Kingdom.

The numerous concessions mentioned above were, however, of a merely temporary character, ceasing to exist in 1898 as a consequence of the denunciation by Great Britain of her most-favoured-nation treaties with Germany and Belgium. This left Canada free to confine her lower tariff rates to the United Kingdom and to sister Dominions and colonies. A British preferential tariff, consisting at first of a remission of 25 p.c. of the duty ordinarily paid (Aug. 1, 1898), and later of a remission of 33⅓ p.c. of the ordinary rate of duty (July 1, 1900), was established. This method of preference was abandoned in 1904 for a specially low rate of duty on almost all imported dutiable commodities.

Subsection 2.—Present Tariffs.[1]

Tariff of 1907 and Empire Preferences.—A new Canadian Customs Tariff was adopted on April 12, 1907, containing three columns of duties, British preferential, intermediate and general. This tariff with amendments is still in operation. The Tariff Act itself mentions as being entitled to the British preference those parts of the Empire which were already enjoying it under previous measures, namely: United Kingdom, British India, Ceylon, New Zealand, Union of South Africa, Southern Rhodesia, Bermuda, British West Indies, British Guiana and Straits Settlements. Power was taken to extend the same advantages, by Order in Council, to other parts of the Empire. Under this authority the British preference was, on Jan. 25, 1913, granted to: Swaziland, Basutoland, Bechuanaland Protectorate, Northern Rhodesia, Nyasaland Protectorate, Uganda Protectorate, East Africa Protectorate, Protectorate of Northern Nigeria, Colony and Protectorate of Southern Nigeria, Gold Coast, Sierra Leone, Gambia, Somaliland Protectorate, Federated Malay States, British North Borneo, Sarawak, Brunei, Mauritius and Dependencies thereof, Seychelles, St. Helena, Ascension, Friendly or Tonga Islands, Fiji, Falkland Islands and British Honduras. Further extensions were to: Irish Free State, Sept. 21, 1923; Territory of Western Samoa, Oct. 1, 1924; Newfoundland, June 26, 1928; Tanganyika Territory, Dec. 19, 1930; Channel Islands, Isle of Man, Kenya Colony and Protectorate, Colony and Protectorate of Nigeria, British Sphere of the Cameroons, British Sphere of Togoland, part of New Guinea under mandate of Australia, and Cyprus, all on Sept. 24, 1931.

Trade Agreements with Australia.—Australia remained almost the only part of the Empire not accorded the British preferential tariff, either by Statute or Order in Council. However, a formal trade Agreement between Canada and Australia (superseding an arrangement of 1925, exchanging limited preferences by legislation) was brought into force on Aug. 3, 1931, providing for exchange of British preferential rates, except as set forth in two schedules—one of which concedes special Canadian rates on some Australian products, while the other specifies the tariff treatment given by Australia to Canada on certain items, as well as enumerating items which Australia reserves as regards granting preferential treatment. Canada is accorded the British preferential tariff of Australia on all but 18 of the 438 items comprising the entire tariff. On six items the intermediate tariff applies and on the other twelve, the general tariff. An important concession to Canada is the creation of new or larger margins of preference than existed in the former tariff on some products of importance to Canada. Other general provisions waive anti-dumping laws, define qualifications for domestic products, and permit either country to apply its general tariff rates to imports from the other which are injuriously affecting the sale of similar domestic goods, provided that, after three months' notice, the exporting country has failed to remedy the situation.

Trade Agreements with British West Indies.—To the British West Indies concessions independent of the British preference were made in an Agreement of 1912, which obtained West Indian preferential rates of four-fifths of the general tariff on some Canadian goods. In 1920 a second trade Agreement, broader both as to the extent of the preferences exchanged and the number of West Indian signatories, superseded the first. This in turn was replaced on July 6, 1925, by one still more extensive, brought formally into force by proclamation as from April 30,

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[1] Revised by W. Gilchrist, Chief, Foreign Tariffs Division, Department of Trade and Commerce.

1927. It is binding for a 12-year period and thereafter until terminated on a year's notice. It includes: Jamaica, Trinidad, Barbados, Bahamas, Leeward Islands, Windward Islands, Bermuda, British Guiana and British Honduras. The larger colonies give a preference of 2s. per brl. on flour, and various stated amounts on some other commodities of importance. The preference on manufactured goods in general, when not specially dealt with, ranges from 20 p.c. to 50 p.c. of the general tariff. In return Canada grants the colonies: (a) specific amounts of preference on sugar and some other selected tropical products; (b) a 50 p.c. reduction from the general tariff on goods for which no special provision is made.

Trade Agreement with New Zealand.—Imports from New Zealand have been accorded British preferential rates since 1904. Furthermore on Oct. 1, 1925, the special rates of the trade Agreement with Australia were extended to New Zealand. Canada was granted the British preferential rates of New Zealand established in 1903. However, from Oct. 12, 1930, after due notice, Canada withdrew the Australian treaty rates as regards imports from New Zealand, and on June 2, 1931, New Zealand withdrew her British preferential rates from all but a few items of Canadian goods. After negotiations a new trade Agreement for one year with New Zealand was brought into force by proclamation as from May 24, 1932. In this Agreement Canada grants New Zealand rates lower than British preferential on various articles of outstanding interest to her, and otherwise extends to her the British preferential tariff. New Zealand restores the British preferential rates to Canada except on six items on which however, she, concedes rates lower than the general tariff. On lumber, laths, and shingles, where no preference existed previously because the general and preferential rates were the same, New Zealand creates a differential between her British preferential and general tariffs, so as to afford Canada a tariff preference on such products. Under a general provision of the Agreement anti-dumping laws of both countries are suspended except in the case of imports injurious to domestic industry when the exporting country does not apply remedial measures after 30 days' notice. Other general provisions extend the Agreement to Western Samoa and Cook Islands.

Preferences by Great Britain Prior to the Imperial Conference, 1932.—Great Britain, between 1919 and 1931, granted preferences to Empire products within the limited scope of her tariff of that time. By 1931 there were preferences on: motor cars, clocks and watches, musical instruments, cinematograph films, all known as "McKenna duties"; sugar, goods containing sugar, glucose, tobaccos, certain dried fruits, chicory, cocoa, coffee, hops, spirits, wines, silk and artificial silk goods; pottery, buttons, household hollow-ware (safeguarding duties); and on "key industry goods" mainly certain chemicals, optical instruments, arc lamp carbons, vacuum tubes, metallic tungsten, some scientific instruments and scientific glassware. In consequence of the Abnormal Importations (Customs Duties) Act, passed Nov. 20, 1931, to remain in effect for six months, giving authority for Orders in Council imposing duties, not to exceed 100 p.c. *ad valorem*, on foreign manufactured goods, some 50 items were subjected to 50 p.c. *ad valorem*. The Horticultural Products (Emergency Customs Duties) Act, passed Dec. 11, 1931, to remain in force for twelve months, gave the Government power to impose duties by Orders in Council up to 100 p.c. *ad valorem* on certain fresh fruit, fresh vegetables and flowers of non-Empire origin. Two Orders were passed under this Act. The Import Duties Act effective Mar. 1, 1932, imposed a duty of 10 p.c. *ad valorem* on goods which were not otherwise subject to duty except for some exemptions including wheat and maize, meats (not including canned), live animals, raw cotton, flax and hemp, wool, hides and skins, newsprint, pulp, wooden pit-props, metallic ores, coal and certain other minerals, unwrought copper and all goods imported for shipbuilding. Products of the Dominions, India, and Southern Rhodesia were exempt from this duty until Nov. 15, 1932, their treatment after that date to depend on the Imperial Conference. Products of other parts of the British Empire were exempt from the 10 p.c. duty without limitation as to date. By an Order effective April 26, 1932, the 10 p.c. general tariff was increased to rates ranging from 15 to 33⅓ p.c. *ad valorem*, on a wide range of merchandise, chiefly manufactured goods.

The Imperial Economic Conference, 1932.—*The United Kingdom-Canada Agreement.*—Under this Agreement the United Kingdom, while continuing to grant to products of Canada those preferences and exemptions from duty established by the Import Duties Act cited above, provided, for important Canadian products, additional preferences by the imposition of new or increased duties on competing foreign imports. Chief among these products were: eggs, butter, cheese, condensed milk, wheat, fresh and canned apples, and unwrought copper. A continuation of a 10 p.c. preference was guaranteed on dutiable timber, fresh and canned fish, asbestos, lead and zinc. Canada was granted unrestricted entry for a maximum quota of 2,500,000 cwt. per annum of bacon and hams, and for 10 years a margin of preference of 2s. 0½d. per lb. on unmanufactured tobacco. Certain preferences accorded in United Kingdom Agreements with other Dominions apply automatically to Canada as an Empire country. As regards eggs, poultry, butter, cheese, and other milk products, free entry is guaranteed for three years, after which the position as regards these articles is subject to review. Increased preferences to Canada in many of the non-self-governing Colonies and Protectorates were provided for on selected articles. The British reserved the right to remove duties on foreign wheat, copper, lead and zinc if at any time Empire producers were unwilling or unable to provide, at world prices, the United Kingdom requirements. In return Canada agreed to widen the margin of preference on imports from Britain on a great variety of goods as set forth in a schedule attached to the Agreement. Actual changes were made in 225 Canadian tariff items, on 223 of which the margin of the British preference was increased. The tariff was lowered on 133 items, more than half of which were placed on the free list, in the other cases the margin was increased by raising the intermediate and general tariffs. By major groups, the tariff changes mainly concern iron and steel, drugs and chemicals, textiles, leather goods, glass, vegetable oils, as well as a wide list of miscellaneous commodities. Generally speaking manufactured goods of a class or kind not produced in Canada were made free. Additional preferences were also provided for imports into Canada of various commodities produced largely in the non-self-governing Colonies and Protectorates. Canada agreed that the tariff should be based on the principle that protective duties should not exceed such a level as would give United Kingdom producers full opportunity of reasonable competition in Canada on the basis of the relative cost of economic and efficient production with special consideration to be given to industries not fully established. Canada undertook to institute the Tariff Board, already authorized by Statute, to review duties on United Kingdom goods in accordance with these principles and not to increase these duties except in accordance with the Board's findings. Canada further agreed to abolish surcharges on imports from the United Kingdom as soon as Canada's finances would allow and to give sympathetic consideration to the abolition of the exchange dumping duty on British goods. The Agreement was to continue for 5 years and be subject thereafter to termination upon 6 months' notice by either party.

Other Agreements.—The Agreement between Canada and the Union of South Africa places commercial relations between these two Dominions on a treaty basis for the first time. It covers the principal commodities which each Dominion can sell to the other, but is more limited in scope than the trade Agreements concluded earlier with Australia and New Zealand. A considerable extension of the preferred list of commodities has been obtained for Canada. Special consideration has been given to corn from South Africa, although fruits in certain seasons, peanuts, sugar and molasses are also given consideration. Wheat, flour, apples, hosiery, binder twine, machinery, vacuum cleaners, iron pipes, tools, shooks, lumber, canned fish, motor cars, electrical appliances, rubber goods and paper products are the chief items on which concessions are made to Canada.

The Agreement with the Irish Free State secured for all goods the produce and manufacture of Canada imported into the Irish Free State the benefits of the lowest rates of duty accorded to similar products of any country. In return, goods the produce of the Irish Free State, when imported into Canada, were to be accorded the same tariff treatment as similar goods imported from the United Kingdom.

The Agreement with Southern Rhodesia made provision for the exchange of preferential treatment on selected lists of commodities. In addition, other goods not enumerated in the schedules continue to enjoy the benefits of existing and future British preferences. Indian corn, citrous fruits and peanuts are given free entry by Canada, whereas Southern Rhodesia gives our manufacturers important concessions on cream separators, batteries, boots and shoes, and paper products.

Other Empire Preferences on Canadian Goods.—Even in the absence of trade Agreements many tariff preferences are accorded to Canadian goods throughout the Empire. The general position now is that nearly all goods, the produce or manufacture of Canada, shipped in accordance with prescribed regulations, are granted tariff preferences over non-Empire goods in Great Britain and Northern Ireland, Australia, New Zealand, Fiji, Western Samoa, British West Indies (thirteen tariffs), Bermuda, British Guiana, British Honduras, Southern Rhodesia, Northern Rhodesia (Zambesi Basin), Gambia, Sierra Leone, Seychelles, British Somaliland, Cyprus, and Isle of Man. To a considerable extent tariff preference is similarly granted to Canadian goods in the Irish Free State, the Union of South Africa, Ceylon, and Mauritius, also on some goods in the Federated Malay States, the Unfederated Malay States, British North Borneo, Sarawak, and Brunei. Empire motor cars enjoy preference in Hong Kong, the Straits Settlements, and Guernsey; spirits and malt liquors in Gibraltar; and wines in the Falkland Islands.

Canadian Tariff Arrangements with Foreign Countries.—Arising out of some old British treaties, later British treaties or favoured-nation clauses sanctioned by Canadian Acts of Parliament, or in consequence of purely Canadian conventions of commerce, Canada extends on a reciprocal basis most-favoured-nation customs treatment except where otherwise indicated to the goods of the following countries:—

Country.	Treaty or Convention.	Date.
Argentine Republic	Treaty of Amity, Commerce and Navigation with Great Britain	Feb. 2, 1825.
Brazil	Exchange of Notes granting Canadian Intermediate Tariff for most-favoured-nation treatment in Brazil.	Dec. 4, 1931.
Economic Union of Belgium and Luxemburg, Belgian colonies, possessions and mandated territory	Convention of Commerce with Canada	July 3, 1924.

Country.	Treaty or Convention.	Date.
Colombia	Treaty of Friendship, Commerce and Navigation with Great Britain	Feb. 16, 1866.
Czechoslovakia	Convention of Commerce with Canada	Mar. 15,1928.
Denmark	Treaties of Peace and Commerce with Great Britain	Feb. 13, 1660-1 July 11, 1670.
Estonia	Canadian Trade Agreements Act accepted favoured-nation provision of United Kingdom—Estonia Treaty of Commerce and Navigation, Jan. 18, 1926	June 11, 1928.
Finland	Finland Trade Agreement Act accepted most-favoured-nation terms of United Kingdom-Finland Treaty of Commerce and Navigation of Dec. 14, 1923	June 12, 1925.
Germany	Exchange of Notes granting Canadian Intermediate tariff for Conventional rates of German tariff (for 3 months)	Jan. 1, 1933.
Hungary	Canadian Trade Agreements Act accepted favoured-nation provision of United Kingdom-Hungary Treaty of Commerce and Navigation of July 23, 1926	June 11, 1928.
Italy, colonies and possessions	Convention of Commerce with Canada	Jan. 4, 1923.
Japan	Japanese Treaty Act sanctioned (with provisos) United Kingdom-Japan Treaty of Commerce and Navigation of April 3, 1911	April 10, 1913.
Latvia	Canadian Trade Agreements Act accepted most-favoured-nation provision of Great Britain-Latvia Treaty of Commerce and Navigation, June 22, 1923.	June 11, 1928.
Lithuania	Canadian Trade Agreements Act accepted most-favoured-nation provision of Great Britain-Lithuania Agreement respecting commercial relations, May 6, 1922	June 11, 1928.
Netherlands, Netherlands Indies, Surinam and Curaçao	Convention of Commerce with Canada	July 11, 1924.
Norway	Convention of Commerce and Navigation between Great Britain and (Sweden and) Norway	Mar. 18, 1826.
Portugal, including Madeira, Porto Santo, and Azores	Canadian Trade Agreements Act accepted most-favoured-nation provision of Great Britain-Portugal Treaty of Commerce and Navigation, Aug. 12, 1914.	June 11, 1928.
Roumania	Exchange of Notes under Article 36, Treaty of Commerce and Navigation between the United Kingdom and Roumania, Aug. 6, 1930	Sept. 30, 1930.
Serb-Croat-Slovene Kingdom (Yugoslavia)	Canadian Trade Agreements Act accepted most-favoured-nation provision of United Kingdom-Serb-Croat-Slovene Kingdom Treaty of Commerce and Navigation, May 12, 1927	June 11, 1928.
Spain	Spanish Treaty Act sanctioned United Kingdom-Spain Treaty of Commerce and Navigation, Oct. 31, 1922 (revised April 5, 1927), also United Kingdom-Spain Agreement, June 27, 1924, regulating treatment of companies	June 11, 1928.
Sweden	Convention of Commerce and Navigation between Great Britain and Sweden (and Norway)	Mar. 18, 1826.
Switzerland	Treaty of Friendship, Commerce and Reciprocal Establishment between Great Britain and Switzerland	Sept. 6, 1855.
Venezuela	Treaty of Amity, Commerce and Navigation between Great Britain and Colombia (of which Venezuela was then part)	April 18, 1825.

Under mutual most-favoured-nation customs treatment each contracting country accords to the goods of the other the lowest duties applied to similar products of any foreign origin, unless there are reservations. These reservations would be tariff concessions, not considered of relatively great importance, which one country may grant to another on historical, geographical, or some related ground. Most-favoured-nation obligations do not include Canadian preferences given to other parts of the Empire. Canada's concessions to France in the Convention of Commerce of 1922 established the rates applicable to most-favoured foreign nations. The Convention was for an indefinite period, subject to termination on either party giving six months' notice. Canada gave such notice on Dec. 16, 1931, so that the Convention expired on June 16, 1932. That abrogation automatically cancelled all rates lower than the intermediate tariff to all most-favoured nations. The Canadian Government expressed its willingness to enter immediately on negotiations with France for a new convention beneficial to the commerce of both countries. Negotiations were carried on in Paris during the winter 1932-33 but at the time of going to press no new Agreement had been ratified.[2] As the situation stands in March, 1933, therefore, rates of the intermediate tariff apply to most-favoured nations, and to Brazil and Germany.

The value to Canada of most-favoured-nation treatment in foreign countries depends on the customs system of the country concerned. Several countries have maximum and minimum schedules, meaning that there are reduced duties for practically all goods imported from reciprocating or treaty countries. Some countries, on account of rates conceded in treaties, maintain reduced duties on specified items of their tariffs. Many countries throughout the world have uniform tariffs regardless of the origin of the goods. The benefit of most-favoured-nation treatment depends also on the extent to which tariff favours apply to countries competing with Canada in the market in question.

Dumping Duties[1].—In the Canadian custom tariff there is also an anti-dumping clause. In 1930 and 1931 the statutory provisions relative to the levying of special or dumping duty were amended. Special or dumping duty is now leviable upon goods exported to Canada of a class or kind made or produced in Canada, if the export or actual selling price to an importer in Canada is less than the fair market value of the same article when sold for home consumption in the usual and ordinary course, in the country whence exported to Canada, at the time of its exportation, or is less than the fair market value, or value for duty thereof, as determined or fixed under the provisions of the Customs Act, R.S.C., 1927, c. 42 (see also sections 36, 37, paragraphs "*a*" and "*e*" of 41, and section 43, Statutes of 1930, c. 2). It is provided that the special duty shall not exceed 50 p.c. *ad valorem* in any case and that goods of a class subject to duty under the Excise Act shall be exempt.

Provision is also made for the levy of additional special or dumping duty not exceeding 50 p.c. when it appears that any person owning or controlling or interested in a business in Canada and also in any other country, or carrying on a business in any other country and owning, controlling or interested in a business operating in Canada is enabled thereby to import goods for further manufacture or assembling, or for resale and disposal of such imported goods, whether in the form as imported or as further processed, assembled or manufactured, at prices below the duty paid value thereof as entered at Customs plus, if any, the cost of processing, assembling or further manufacture in Canada. The Minister may declare that goods of such class or kind were and are an importation subject to additional special or dumping duty not exceeding 50 p.c.

Drawbacks.—Drawbacks of 99 p.c. of duties paid on imported materials are allowed by the customs laws and regulations in cases where articles manufactured from such materials are afterwards exported.

Surtax.—In 1903 the Customs Tariff Act of 1897 was amended to provide for a surtax of one-third of the duty on goods, the product of any foreign country which treats imports from Canada less favourably than those from other countries. This surtax was at once applied against certain German goods but was removed on Mar. 1, 1910, when Canada obtained the conventional rates of the German tariff on a specified list of goods. Under the Customs Tariff Act of 1914 the rate of surtax was left to be fixed in each case by the Governor in Council but was not to exceed 20 p.c. *ad valorem*. In the 1931 Tariff Amendments the maximum of the rate of surtax was increased to 33⅓ p.c. *ad valorem*.

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[1] Revised in the Customs and Excise Division, Department of National Revenue. [2] An Agreement between the two Governments was signed on May 12, 1933.

Powers of the Governor in Council.—The Governor in Council may make reductions of duties on goods imported into Canada from countries granting reductions on Canadian products.

The Governor in Council is given power to prohibit the importation of any goods exported directly or indirectly from any country not a contracting party to the Treaty of Versailles executed at Paris, France, on June 28, 1919.

In the event of producers of goods taking advantage of any duty under the provisions of the Customs Tariff, the Governor in Council is empowered to reduce or remove such duty and, where a producer violates the provisions of sec. 17, to impose upon all his products an Excise duty equivalent to the amount of Customs duty which would be paid by such goods if imported under the provisions of the General Tariff. These provisions, however, do not apply to agricultural products.

Combinations.—Whenever it is deemed in the public interest to inquire into any combination alleged to exist detrimental to consumers, the Governor in Council may commission or empower any judge of the Supreme Court or of the Exchequer Court of Canada, or of any superior court or county court in Canada, to hold an inquiry in a summary way and to report to the Governor in Council whether such combination exists, the judge being empowered to compel attendance of witnesses, examine them under oath, and require production of books and papers, etc., and, upon the judge reporting the existence of such a combination, the Governor in Council is given authority to admit the article concerned free of duty, or so reduce the duty thereon as to give the public the benefit of reasonable competition if it appears that the disadvantage to the consumer is facilitated by the duties of Customs imposed on a like article.

Section 2.—The Commercial Intelligence Service.[1]

The Commercial Intelligence Service, maintained by the Department of Trade and Commerce, is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in markets and the current demand or opportunities for Canadian products. They also secure and forward to the Department in Ottawa specific inquiries for Canadian goods and in general exert their best efforts for the development and expansion of overseas markets.

Organization at Ottawa.—Besides the overseas organization of the Commercial Intelligence Service, there is a headquarters staff at Ottawa. This is presided over by a Director, who is the head of the Service and administers and unifies the work assigned to the various Trade Commissioners. Assisting the Director are the following divisions: Trade Inquiries—where trade reports and information on foreign markets are filed in order to answer foreign and Canadian trade inquiries; Editorial—where the Commercial Intelligence Journal is compiled; Foreign Tariffs—where all the latest tariff data are kept and tariff inquiries answered; and the division handling the Directory of Canadian Exporters—where Canadian exporters are listed, with their agents abroad, commodities handled, ratings, cables and codes used, etc., and where the Foreign Importers' Directory is kept up to date by periodical reports from the Canadian Trade Commissioners.

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[1] Revised by L. D. Wilgress, Director, Commercial Intelligence Service, Department of Trade and Commerce.

Also, in order to keep abreast of Canadian industrial development, each Canadian Trade Commissioner makes a periodic tour of Canada and while in this country gives first-hand information to the Canadian manufacturer regarding opportunities and conditions of trade in his territory.

Organization Abroad.—A list of the countries in which Canadian Trade Commissioners are located, showing territory covered, name, post office and cable address of the Trade Commissioner in each case, is given below:—

CANADIAN GOVERNMENT TRADE COMMISSIONERS.[1]

NOTE.—Cable address of Trade Commissioners is "Canadian" unless otherwise stated.

Argentine Republic (Territory includes Chile and Uruguay)	Harry A. Scott, B. Mitre 430, Buenos Aires (1).
Australia	D. H. Ross. Address for letters—Box 196c, G.P.O., Melbourne. Office—Safe Deposit Building, Melbourne. Commercial Agent—B. Millin, The Royal Exchange, Sydney, N.S.W.
Belgium	Henri Turcot, 98 Boulevard Adolphe Max, Brussels.
Brazil	A. S. Bleakney. Address for letters—Caiza Postal 2164, Rio de Janeiro. Office—Ed. Da "A Noite", Sala 802, Praca Maua.
British West Indies—	
Trinidad (Territory includes Barbados, Windward and Leeward Islands and British Guiana)	Acting Trade Commissioner. Address for letters—P.O. Box 125, Port of Spain. Office—Colonial Bank Building.
Jamaica (Territory covers Jamaica, Hayti, the Bahamas, and British Honduras)	F. W. Fraser, P.O. Box 225. Office—Canadian Bank of Commerce Chambers, Kingston.
China	L. M. Cosgrave. Address for letters—P.O. Box 264, Shanghai. Office—Daily News Building, 17 The Bund, Shanghai. Paul Sykes. Address for letters—P.O. Box 160, Dairen, Manchuria. Office—Cornabe Building, 1 Higashi-Koen-Cho, Dairen, Manchuria. (Territory covers Manchuria.)
Cuba (Territory includes San Domingo and Puerto Rico)	E. L. McColl. Address for letters—Apartado 1945, Havana. Office address—Royal Bank of Canada Building, Calle Aguiar 75, Havana.
Egypt (Territory includes the Sudan, Palestine, Cyprus, Iraq, Syria and Persia)	Yves Lamontagne. Address for letters—P.O. Box 1770, Cairo. Office—22 Shari Kasr el Nil, Cairo.
France (Territory includes French Colonies in North Africa)	Hercule Barré, 3 rue Scribe, Paris (9). Cable address—Cancomac.
Germany (Territory covers Germany—except the Rhine Valley — Czechoslovakia, Austria, and Eastern European countries)	Acting Trade Commissioner, Monckebergstrasse 31, Hamburg.
Greece (Territory includes Turkey)	Acting Trade Commissioner, 1 Corai Street, Athens.
Hong Kong (Territory includes South China, the Philippines, British North Borneo, and Indo-China)	V. E. Duclos. Address for letters—P.O. Box 80, Hong Kong. Office—Gloucester Building, Hong Kong.
India and Ceylon	R. T. Young. Address for letters—P.O. Box 2003, Calcutta. Office—8 Esplanade Mansions, Government Place East, Calcutta.
Irish Free State and Northern Ireland	J. H. English, 66 Upper O'Connell Street, Dublin, Irish Free State; and 44 Ann Street, Belfast, Northern Ireland. Cable Address—Adanac.
Italy (Territory includes Spain, Portugal, Gibraltar, Canary Islands, Malta, Italian colonies in Africa, Albania, and Yugoslavia)	A. B. Muddiman, Via Manzoni Nr. 5, Milan (102).
Japan—	
Tokyo	J. A. Langley, Commercial Secretary; Richard Grew, Trade Commissioner. Address for letters—P.O. Box F101, Tokyo Central. Office—Imperial Life Assurance Building, Marunouchi, Tokyo.
Kobe	Acting Trade Commissioner. Address for letters—P.O. Box 230, Kobe. Office—Chamber of Commerce Building, Kobe.

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[1] As at Jan. 1, 1933.

CANADIAN GOVERNMENT TRADE COMMISSIONERS—concluded.

Mexico (Territory includes Guatemala, Honduras, and Salvador)	Acting Trade Commissioner. Address for letters—Apartado Num. 126-bis, Mexico City. Office—Edificio Banco de Londres y Mexico, Num. 30, Mexico City. Cable address—Cancoma.
Netherlands (Territory includes the Rhine Valley and Switzerland)	J. C. MacGillivray, Beursplein 26B, Rotterdam.
Netherlands East Indies (Territory includes Straits Settlements, Federated Malay States and Siam)	G. R. Heasman. Address for letters—P.O. Box 84, Batavia, Java. Office—Chartered Bank Building, Malacca St., Batavia, Java.
New Zealand (Territory includes Fiji and Western Samoa)	C. M. Croft. Address for letters —P.O.Box 33, Auckland. Office—Yorkshire House, Shortland Street, Auckland.
Norway (Territory includes Scandinavian countries and Finland	F. H. Palmer, Jernbanetorvet 4, Oslo.
Panama (Territory includes Venezuela, Colombia, Nicaragua and Costa Rica)	J. A. Strong. Address for letters—P.O. Box 222, Panama City. Office—Royal Bank of Canada Building, Santa Ana Plaza, Panama City.
Peru (Territory includes Bolivia and Ecuador	C. S. Bissett. Address for letters—Casilla 1212, Lima. Office—Calle Coca, 478, Lima.
South Africa (Territory includes Southwest Africa, the Rhodesias, Nyasaland, Tanganyika Territory and Kenya Colony)	G. R. Stevens. Address for letters—P.O. Box 683, Cape Town. Office—Cleghorn and Harris Building, Adderley Street, Cape Town. Cable address—Cantracom.
United Kingdom—	
London (Territory covers Home Counties, South-eastern Counties, and East Anglia)	Harrison Watson, Canada House, Trafalgar Square, S.W. 1. Cable address—Sleighing, London.
London (Territory—for fresh fruit only—covers United Kingdom, Norway, Denmark, Sweden, France, Holland, Belgium, Germany, and Spain)	J. Forsyth Smith, Fruit Trade Commissioner, Walter House, Bedford Street, Strand, W.C. 2. Cable address—Canfrucom.
London	W. A. Wilson, Animal Products Trade Commissioner, Canada House, Trafalgar Square, S.W. 1. Cable address—Agrilson.
Liverpool (Territory covers North of England, Lincolnshire, North Midlands, and North Wales)	H. R. Poussette, Century Bldgs., 31 North John Street.
Bristol (Territory covers West of England, South Wales and South Midlands)	Douglas S. Cole, Northcliffe House, Colston Ave.
Glasgow	Gordon B. Johnson, 200 St. Vincent Street. Cable address—Cantracom.
United States—	
New York City (Territory includes Bermuda)	Frederic Hudd, 25 Broadway. Cable address—Cantracom.

Under an arrangement made by the Minister of Trade and Commerce with the British Foreign Office, Canadian manufacturers exporters and others interested in trade matters may secure information and advice from British commercial diplomatic officers and British consuls in all countries in which Canada is not represented by her own Commercial Intelligence Service.

Commercial Intelligence Journal.—The Commercial Intelligence Journal, containing the reports of the Trade Commissioners and other pertinent material relating to export trade, is published weekly by the Department of Trade and Commerce in both English and French editions. The subscription price for either edition is $1 per annum in Canada and $3.50 outside of the Dominion. Special reports dealing with various phases of Canada's export trade are also issued from time to time, as supplements to the Commercial Intelligence Journal.

Section 3.—Statistics of External Trade.[1]

NOTE.—For the correct interpretation of the statistics of external trade, it is necessary that the following definitions and explanations of the terms used should be carefully kept in mind.

Fiscal Years.—The Canadian fiscal year ended on June 30 of the years from 1868 to 1906, and on Mar. 31 of 1907 and subsequent years.

Quantities and Values.—In all the following tables of imports and exports, the quantities and values are based upon the declarations of importers (import entries) and exporters (export entries), as subsequently checked by customs officials.

Imports: Valuation.—"Imports" means "Imports entered for consumption". "Entered for consumption" does not imply that the goods have been actually consumed in Canada, but that they have passed into the possession of the importer and that duty has been paid on that portion liable for duty.

The value of imported merchandise under the main provisions of the law is the fair market value or the price thereof when sold for home consumption in the principal markets of the country whence, and at the time when, the same was exported directly to Canada, also not less than the price to jobbers or wholesalers generally, nor less than the actual cost of production of goods at time of shipment plus a reasonable advance for selling cost and profit. The values shown are in Canadian dollars converted from the currency of the country whence exported at exchange ratios as prescribed for Customs purposes by existing authorities.

Canadian Exports: Valuation.—"Canadian produce" exported includes Canadian products or manufactures, also exports of commodities of foreign origin which have been changed in form or enhanced in value by further manufacture in Canada, such as sugar refined in Canada from imported raw sugar, flour ground from imported wheat, and articles constructed or manufactured from imported materials. The value of exports of Canadian merchandise is the actual cost or the value at the time of exportation at the points in Canada whence originally shipped.

Foreign Exports: Valuation.—"Foreign produce" exported consists of foreign merchandise which had previously been imported (entered for home consumption). The value of such commodities is the actual cost.

Countries to which Trade is Credited.—Imports are classified as received from the countries whence they were consigned to Canada. The countries of consignment are the countries from which the goods have come, without interruption of transit, save in the course of transhipment or transfer from one conveyance to another. The countries whence goods are consigned are not necessarily the countries of actual origin, since goods produced in one country may be purchased by a firm in another country and thence despatched, after a longer or shorter interval, to Canada. In such cases the second country would be the country of consignment to which the goods would be credited. An example is the case of tea grown in the Orient but purchased in the bonded market in London, England; Canadian statistics record such imports as coming from the United Kingdom.

Exports are credited to the country of final destination, *i.e.*, the country to which they are consigned, whether that country possesses a seaboard or not. The country of final destination is the country to which goods exported from Canada are intended to pass, without interruption of transit save in the course of transhipment or transfer from one means of conveyance to another.

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[1] Revised by W. A. Warne, Chief, External Trade Branch, Dominion Bureau of Statistics. This Branch publishes the Annual Report of the Trade of Canada, the Condensed Preliminary Report of the Trade of Canada (annual), the Quarterly Report of the Trade of Canada, the Calendar Year Report of the Trade of Canada, the Summary of the Trade of Canada (monthly), etc. For complete list of the publications of this Branch see Chapter XXIX, Section 1, under "External Trade".

Discrepancies in Trade Statistics between Canada and Other Countries.—Canadian statistics of exports are rarely in exact agreement with the import figures of her customers and similar differences occur with Canadian imports. Many factors contribute to these discrepancies; among these are the following:—

(1) Differences in the basis of the Canadian valuations and the valuations of other countries.

(2) Even where the statistics cover the same period of time, there are quantities of goods in transit at the beginning and end of the period. Such goods are included in the statistics of the exporting country but not in the statistics of the importing country.

(3) By far the greatest discrepancies occur from the impossibility of determining the country of final destination for exports or the actual country of origin for imports. Thus about 20 p.c. of Canada's exports to overseas countries are shipped *via* the United States. Some of this is credited by importing countries to the United States. Canadian grain exports, for example, are to a large extent routed through the United States in bond. Most of this grain leaves Canada with the United Kingdom as the stated destination, but large quantities are later diverted to other European or overseas countries and some is taken out of bond for consumption in the United States. Thus the Canadian record of exports to the United Kingdom may be $100,000,000 or more in excess of Canadian products actually received by the United Kingdom, while stated exports to other overseas countries are short this amount. Again, United States grain is routed through Canada and shipped from Montreal and therefore frequently shown by other countries as imported from Canada, while it is included in United States statistics as an export to Canada. As mentioned above, purchases in bonded markets in England, Germany, Belgium and France are included in Canadian imports from those countries but are not included by those countries in exports to Canada.

For more detailed discussion of this subject see the article and tables on "Discrepancies in Trade Statistics" on pp. 778-81 of the Annual Report on the Trade of Canada, 1928, published by the Dominion Bureau of Statistics.

Subsection 1.—Historical Statistics of Canadian Trade.

A general view of the trade of Canada in the fiscal years from 1868 to 1932 is furnished in Table **1** (p. 516), giving the imports of merchandise for home consumption, dutiable and free, and the exports of Canadian and foreign produce, the total trade as here given being the aggregate of the two. Necessarily, some difficulties have been met in maintaining comparable statistics through such a length of time, one of the most serious of these arising through different methods adopted in dealing with exports of foreign produce. For example, the shrinkage in the exports of foreign produce after 1920 has been due to change of statistical method rather than to actual diminution in value or volume of such goods exported. For the past 12 years, re-exports of foreign products from bonded warehouses have no longer been included in Canadian trade statistics either as imports or as exports, while the exports of foreign produce during this period have been composed of goods which had previously been entered as imports for home consumption. Such goods are debited to Canada when entering this country, and should be credited to Canada when re-exported.

From Table **2** it will be observed that, in most of the years from Confederation to the outbreak of the Great War, imports entered for consumption exceeded total exports, especially during the great growing period from 1904 to 1914. From 1915 to 1929, except in the fiscal year ended Mar. 31, 1921, there was an annual excess of total exports over imports entered for consumption. In the fiscal years ended Mar. 31, 1930 and 1931, however, there was an excess of imports which was changed to an excess of exports in 1932 and 1933.

The percentage of exports to imports rose to a peak of 164·62 in 1918, owing to the exportation of war supplies, then dropped to 97·60 in 1921, rose again to 143·28 in 1926 and has since declined to 109·72 in 1929, 91·72 in 1930 and 90·12 in 1931, rising to 101·56 in 1932 and 118·32 in 1933.

The values of coin and bullion imported and exported are shown in Table **3**. Amounts collected in export duties from 1868 to 1892, and in import duties from 1868 to 1932, together with the cost of collection expressed as a percentage of the total duties, are stated by years in Table **4**. Tables **5** and **6** show respectively our exports of Canadian produce and our imports for home consumption, furnishing figures of our trade with the United Kingdom, United States and other countries since 1868. These figures show the overwhelming predominance of the two great English speaking countries in our foreign trade; in the fiscal year ended Mar. 31, 1932, for example, 71·0 p.c. of our exports of domestic produce was shipped to these two countries, which, in the same year, together provided 79·2 p.c. of our imports for home consumption. Tables **7** and **8** show respectively by years the percentage proportions of imports from the United Kingdom and the United States to totals of dutiable and free imports since 1907, and the *ad valorem* rates of duty collected on imports from these and from all countries from 1868 to 1932.

Importations of important raw materials used in Canadian manufacturing industries are given in Table **9** for the fiscal years ended 1911 to 1933.

Subsection 2.—General Analysis of Current Import and Export Trade.

The external trade of Canada, in common with that of every other country in the world, suffered a severe decline, both in volume and in value, following the War. By 1929, however, the value of Canada's external trade had reached an amount greater than even during the war years. Since then Canada's trade, like that of the principal trading countries of the world, has declined severely, reflecting the general depression in commerce and industry. The adverse factors which influenced Canada's foreign trade in the fiscal year 1930-31 continued during 1931-32, and the Dominion's trade suffered a still further decline. The general decline in world trade, which had its beginning in the fall of 1929 and continued throughout the year 1930, was particularly severe during the fiscal year 1931-32, being more marked than for the fiscal year 1930-31. The further drop in commodity prices was one of the principal factors in this decline. The particulars are set forth in the following statement:—

Fiscal Year.	Imports.		Exports (Canadian).	
	Declared Value.	Based on 1926 Average Value.	Declared Value.	Based on 1926 Average Value.
	$	$	$	$
1924	893,367,000	855,692,000	1,045,351,000	1,189,945,000
1925	796,933,000	805,247,000	1,069,067,000	1,120,360,000
1926	927,329,000	927,329,000	1,315,356,000	1,315,356,000
1927	1,030,893 000	1,100,530,000	1,252,158,000	1,283,685,000
1928	1,108,956,000	1,195,690,000	1,228,349,000	1,302,285,000
1929	1,265,679,000	1,403,097,000	1,363,710,000	1,548,578,000
1930	1,248,274,000	1,413,206,000	1,120,258,000	1,255,496,000
1931	906,613,000	1,169,380,000	799,743,000	1,097,832,000
1932	578,502,000	880,930,000	576,344,000	1,005,876,000

Canada's total imports of merchandise in 1932, amounting to $578,503,904, show a decrease of 36·2 p.c. compared with 1931, and exports of domestic merchandise, amounting to $576,344,302, a decrease of 27·9 p.c. During the past year, the drastic decline in commodity prices has materially affected the comparability of trade statistics. When the fluctuations in import and export prices have been eliminated from Canadian trade, by re-valuing the quantities imported and exported in 1932 at 1926 average values, as in the above table, the 1932 imports declined 24·7 p.c. and exports 8·4 p.c. from 1931. (See also Subsection 10 and Table **22** of this chapter.)

The decline in Canada's trade was not so marked as that of the United States and some other countries. However, the trade of both Canada and the United States suffered more from the general trade depression of the world than the trade of the chief commercial countries of Europe, with the exception of Hungary and Spain.

Statistical Tables of Current Trade.—Tables **10** to **18** (pp. 524–589) deal with the current trade statistics of the Dominion. Tables **10** and **11** are summary tables, showing by groups our trade with the United Kingdom, the United States and all countries, by values and percentages, for the latest four fiscal years. Table **12** shows the same in detail for exports and Table **13** for imports of all important articles. Table **14** shows by main classes imports as dutiable and free and exports as of Canadian and foreign produce for the five fiscal years 1928-32. Table **15** shows imports and exports for the fiscal year ended 1932 by degree of manufacture and by origin, and Table **16** gives similar information on a classification according to purpose. Table **17** gives our imports and exports for the two latest years by ports and provinces, and Table **18** shows the values imported from different countries under the general, preferential and treaty rate tariffs in 1931 and 1932.

The statistics in the following table indicate the trend of Canadian trade by main groups in 1914 (pre-war year), 1921 (peak year of post-war inflation) and 1932, (a) with all countries, (b) with the United Kingdom, and (c) with the United States.

SUMMARY OF THE TRADE OF CANADA BY MAIN GROUPS, FISCAL YEARS ENDED MAR. 31, 1914, 1921 AND 1932.

(a) WITH ALL COUNTRIES.

Group.	Values of Imports (Million $).			Values of Exports Canadian (Million $).			Percentages of 1932—			
							Imports to—		Exports to—	
	1914.	1921.	1932.	1914.	1921.	1932.	1914.	1921.	1914.	1921.
Agricultural and Vegetable Products	97·6	259·4	128·6	201·2	482·1	204·4	131·7	49·6	101·6	42·4
Animals and Products	41·1	61·7	24·6	76·6	188·4	68·8	59·8	39·9	69·8	36·5
Fibres and Textiles	109·2	243·6	83·9	1·9	18·8	5·5	76·8	34·5	290·0	29·3
Wood and Paper	37·4	57·5	32·0	63·2	284·6	175·7	85·5	55·6	278·0	61·8
Iron and Its Products	143·8	245·6	98·8	15·5	76·5	15·5	68·7	40·2	100·0	20·3
Non-Ferrous Metals	35·6	55·7	34·3	53·3	45·9	69·1	96·4	61·6	129·6	150·5
Non-Metallic Minerals	85·3	206·1	102·2	9·3	40·4	13·4	119·8	49·6	144·0	33·2
Chemicals and Allied Products	17·1	37·9	30·7	4·9	20·1	10·5	179·5	81·0	214·0	52·2
Miscellaneous Commodities	52·1	72·7	43·4	5·7	32·4	13·4	83·3	59·7	235·0	41·4
Totals	619·2	1,240·2	578·5	431·6	1,189·2	576·3	93·5	46·7	133·5	48·5

(b) WITH THE UNITED KINGDOM.

Group.	Values of Imports (Million $).			Values of Exports Canadian (Million $).			Percentages of 1932—			
							Imports to—		Exports to—	
	1914.	1921.	1932.	1914.	1921.	1932.	1914.	1921.	1914.	1921.
Agricultural and Vegetable Products	16·2	38·7	30·2	146·8	141·2	98·7	186·5	78·0	67·2	70·0
Animals and Products	5·7	5·2	2·6	35·4	91·3	32·0	45·6	50·0	90·5	35·0
Fibres and Textiles	60·6	111·3	30·6	0·2	2·6	1·4	50·5	27·5	700·0	53·8
Wood and Paper	3·7	3·1	3·8	12·8	36·8	13·7	102·7	122·6	107·0	37·2
Iron and Its Products	17·3	16·7	13·4	1·4	17·6	3·8	77·4	80·2	272·0	21·6
Non-Ferrous Metals	4·8	6·7	4·3	16·6	9·9	17·3	89·5	64·2	104·2	174·7
Non-Metallic Minerals	6·3	9·1	10·3	0·4	3·1	0·9	163·5	113·2	225·0	29·0
Chemicals and Allied Products	4·3	6·0	4·1	0·6	3·4	3·1	95·4	68·3	516·0	91·1
Miscellaneous Commodities	13·2	17·1	7·1	1·0	6·9	3·1	53·8	41·5	310·0	44·9
Totals	132·1	213·9	106·4	215·2	312·8	174·0	80·6	49·7	80·8	55·6

(c) WITH THE UNITED STATES.

Group.	Values of Imports (Million $).			Values of Exports Canadian (Million $).			Percentages of 1932—			
							Imports to—		Exports to—	
	1914.	1921.	1932.	1914.	1921.	1932.	1914.	1921.	1914.	1921.
Agricultural and Vegetable Products	44·1	119·6	44·6	34·1	146·6	11·0	101·1	37·3	32·3	7·5
Animals and Products	23·3	42·9	14·2	32·3	75·8	22·4	60·9	33·1	69·4	29·5
Fibres and Textiles	32·5	101·7	30·9	1·2	7·1	1·7	95·0	30·4	142·0	23·9
Wood and Paper	31·7	52·4	25·6	45·2	216·0	140·5	80·8	48·8	311·0	65·0
Iron and Its Products	121·4	226·9	81·0	2·0	19·6	3·1	66·7	35·7	155·0	15·8
Non-Ferrous Metals	27·7	46·0	27·0	34·2	30·0	36·2	97·5	58·7	105·8	120·6
Non-Metallic Minerals	74·2	188·4	77·9	7·2	22·5	8·2	105·0	41·4	114·0	36·5
Chemicals and Allied Products	9·6	28·1	20·4	3·2	12·0	4·1	212·4	72·6	128·2	34·2
Miscellaneous Commodities	31·8	50·2	30·1	4·0	12·7	8·0	94·7	60·0	200·0	63·0
Totals	396·3	856·2	351·7	163·4	542·3	235·2	88·7	41·1	144·0	43·4

The statistics in the following table indicate the trend of Canadian trade from 1914 to 1932, (a) with all countries, (b) with the United Kingdom, and (c) with the United States.

SUMMARY OF TREND OF CANADIAN TRADE, 1914-32.

(Values in Millions of Dollars.)

Fiscal Year.	Imports into Canada.				Exports from Canada.			Excess of— Imports (i) Exports (e).	Percentage of Exports to Imports.
	Dutiable Goods.	Free Goods.	Total Imports.	Per cent Free.	Canadian Produce.	Foreign Produce.	Total Exports.		
(a) With All Countries.									
1914	410·3	208·9	619·2	33·7	431·6	23·8	455·4	(i) 163·8	73·6
1915	279·8	176·1	455·9	38·6	409·4	52·0	461·4	(e) 5·5	101·2
1916	289·4	218·8	508·2	43·0	741·6	37·7	779·3	(e) 271·1	153·3
1917	461·7	384·7	846·4	45·4	1,151·4	27·8	1,179·2	(e) 332·8	139·3
1918	542·3	421·2	963·5	43·7	1,540·0	46·1	1,586·1	(e) 622·6	164·6
1919	526·5	393·2	919·7	42·7	1,216·4	52·3	1,268·7	(e) 349·0	137·9
1920	693·6	370·9	1,064·5	34·8	1,239·5	47·1	1,286·6	(e) 222·1	120·9
1921	847·5	392·6	1,240·1	31·6	1,189·2	21·2	1,210·4	(i) 29·7	97·6
1922	495·6	252·2	747·8	33·7	740·2	13·7	753·9	(e) 6·1	100·8
1923	537·3	265·3	802·6	33·0	931·5	13·8	945·3	(e) 142·7	117·8
1924	591·3	302·1	893·4	33·8	1,045·4	13·4	1,058·8	(e) 165·4	118·5
1925	516·0	280·9	796·9	35·1	1,069·1	12·3	1,081·4	(e) 284·5	135·7
1926	583·0	344·3	927·3	37·1	1,315·4	13·3	1,328·7	(e) 401·4	143·3
1927	659·9	371·0	1,030·9	36·0	1,252·2	15·4	1,267·6	(e) 236·7	122·9
1928	710·1	398·9	1,109·0	36·0	1,228·4	22·2	1,250·6	(e) 141·6	112·8
1929	821·1	444·6	1,265·7	35·1	1,363·7	25·2	1,388·9	(e) 123·2	109·7
1930	819·2	429·1	1,248·3	34·5	1,120·3	24·7	1,145·0	(i) 103·3	91·7
1931	574·1	332·5	906·6	36·6	799·7	17·3	817·0	(i) 89·6	90·1
1932	388·5	190·0	578·5	32·8	576·4	11·2	587·6	(e) 9·1	101·5
(b) With the United Kingdom.									
1914	102·4	29·7	132·1	22·5	215·2	7·1	222·3	(e) 90·2	167·5
1915	68·0	22·1	90·1	24·5	186·6	25·1	211·7	(e) 121·6	234·9
1916	52·0	25·4	77·4	32·8	451·9	11·2	463·1	(e) 385·7	598·3
1917	75·5	31·6	107·1	29·5	742·1	13·9	756·0	(e) 648·9	705·9
1918	58·0	23·3	81·3	28·6	845·5	15·6	861·1	(e) 779·8	1,059·1
1919	50·0	23·0	73·0	31·5	540·7	20·1	560·8	(e) 487·8	768·2
1920	93·2	33·1	126·3	26·2	489·2	6·8	496·0	(e) 369·7	392·7
1921	170·1	43·8	213·9	20·5	312·8	1·4	314·2	(e) 100·3	146·9
1922	95·1	22·0	117·1	18·8	299·4	1·0	300·4	(e) 183·3	256·5
1923	116·2	25·1	141·3	17·7	379·1	0·8	379·9	(e) 238·6	268·8
1924	126·1	27·5	153·6	17·8	360·1	1·1	361·2	(e) 207·6	235·1
1925	124·7	26·4	151·1	17·5	395·9	1·3	397·2	(e) 246·1	262·8
1926	133·1	30·6	163·7	18·6	508·2	1·1	509·3	(e) 345·6	311·1
1927	135·0	28·9	163·9	17·6	446·9	1·1	448·0	(e) 284·1	273·3
1928	150·1	36·4	186·5	19·1	410·7	2·1	412·8	(e) 226·3	222·1
1929	154·4	39·6	194·0	20·4	429·7	1·9	431·6	(e) 237·6	222·4
1930	148·7	40·5	189·2	21·4	281·7	1·4	283·1	(e) 93·9	149·6
1931	108·6	40·9	149·5	27·4	219·3	1·4	220·7	(e) 71·2	147·5
1932	79·7	26·7	106·4	25·1	174·1	0·9	175·0	(e) 68·6	164·5
(c) With the United States.									
1914	249·5	146·8	396·3	37·0	163·4	13·6	177·0	(i) 219·3	44·6
1915	168·6	128·5	297·1	43·2	173·3	13·0	186·3	(i) 110·8	62·7
1916	199·5	171·4	370·9	46·2	201·1	15·6	216·7	(i) 154·2	58·4
1917	332·0	333·3	665·3	50·1	280·6	10·0	290·6	(i) 374·7	43·7
1918	429·3	336·6	792·9	45·8	417·2	23·6	440·8	(i) 352·1	55·6
1919	416·5	333·7	750·2	44·5	454·9	22·8	477·7	(i) 272·5	63·7
1920	499·7	301·4	801·1	37·6	464·0	37·1	501·1	(i) 300·0	62·5
1921	544·0	312·2	856·2	36·5	542·3	18·4	560·7	(i) 295·5	65·5
1922	312·1	203·9	516·0	39·5	292·6	11·5	304·1	(i) 211·9	58·9
1923	332·2	208·8	541·0	38·6	369·1	11·2	380·3	(i) 160·7	70·3
1924	355·9	245·3	601·2	40·8	430·7	10·9	441·6	(i) 159·6	73·4
1925	287·1	222·7	509·8	43·7	417·4	9·8	427·2	(i) 82·6	83·8
1926	338·0	270·7	608·6	44·5	474·9	11·0	485·9	(i) 122·7	79·7
1927	392·7	294·3	687·0	42·9	466·4	12·9	479·3	(i) 207·7	69·7
1928	416·0	302·9	718·9	42·1	478·1	18·7	496·8	(i) 222·1	69·0
1929	523·9	344·1	868·0	39·6	499·6	21·7	521·3	(i) 346·7	60·1
1930	523·3	324·1	847·4	38·2	515·0	21·6	536·6	(i) 310·8	63·3
1931	359·6	224·8	584·4	38·5	349·6	14·3	363·9	(i) 220·5	62·3
1932	229·6	122·1	351·7	34·7	235·2	9·2	244·4	(i) 107·3	69·5

Subsection 3.—Trade with the United Kingdom and the British Empire.

Trade with the United Kingdom.—The import and export trade with the United Kingdom is outlined for the years 1914, 1921 and 1932 for the main groups of commodities on p. 496, while total imports and exports are shown for each year since Confederation in Tables **5** and **6** on pp. 520 and 521. In the post-war period imports from the United Kingdom have risen from a low point at $117,135,000 in the fiscal year ended 1922 to a peak of $194,041,000 in 1929 and declined again to $149,497,000 in 1931 and $106,372,000 in 1932. In the case of exports of Canadian produce, the value was $299,362,000 in 1922, $508,238,000 in 1926, $429,730,000 in 1929, $219,246,000 in 1931 and $174,044,000 in 1932. Bountiful harvests and receptive world markets were the basis of a high level of exports in the years 1925-29. In this connection it should be emphasized that there is a wide discrepancy between Canadian figures of exports to the United Kingdom and the United Kingdom record of imports from Canada, due to the diversion to other countries of grain products exported *via* the United States (see p. 493), so that the excess of Canadian exports to the United Kingdom over imports from that country is not actually so large as our records show.

In connection with the serious decline in trade with the United Kingdom since 1929, it should be remembered that short crops in 1929 and subsequent years, together with an over-supply of foodstuffs on the world's markets, affected Canada's trading position very unfavourably while, as a result of the wide decline in prices, the recession in the value of exports and imports has been much greater than that in volume.

Canadian exports to the United Kingdom are made up very largely of grains and vegetable products, animal products, wood and paper products and non-ferrous metals. In the fiscal year ended 1932, the exports of wheat and wheat flour declined nearly $47,000,000 as compared with 1931. Other important commodities to show reductions in value of exports were: rubber footwear, cheese, raw furs, newsprint paper, planks and boards, nickel in matte and pig lead. Important exports to the United Kingdom to show increases were: barley, raw tobacco, oats, live cattle, butter and copper. Exports to the United Kingdom of non-ferrous metal products, owing to the increased productive capacity of Canada in commodities of this group, have stood up remarkably well. In fact, the total of $17,266,000 in 1932 was higher than for any previous year with the exception of the war years 1917-19, when prices were very much higher.

A decrease in imports from the United Kingdom in the fiscal year ended 1932, as compared with 1931, occurred in every one of the nine main groups. However, in recent years from 50 p.c. to 60 p.c. of Canada's imports from the United Kingdom have been made up of textiles and alcoholic beverages. It was in these commodities that the principal decreases occurred—$18,657,000 in textiles and $7,821,000 in beverages. Other leading imports to show reductions were: tea, leather, iron and steel products, and coal. No leading imports showed increased values.

The commodities making up Canada's export and import trade with the United Kingdom are dealt with in detail in Tables **12** and **13** of this chapter.

Trade of Canada with the British Empire.—Canada was the first of the British Dominions to grant a preference on goods the produce and manufacture of the United Kingdom and reciprocating British Dominions and possessions. This preference was extended by Order in Council from time to time to other portions of the British Empire until now it is applicable to practically every British Dominion and possession. In the case of Newfoundland, in addition to the preference, Canada grants free admission to fish and fish products. Australia receives special concessions under the Trade Agreement of 1931 and the British West Indies under the Agreement of 1925 referred to on p. 483. The British preferential tariff enacted in 1897, as well as trade treaties and agreements negotiated with British and foreign countries, have had the effect of stimulating Canada's external trade. When the British preference became effective in 1897 Canada's total imports from the United Kingdom in that year amounted to only $29,401,000, compared with an import in 1887 valued at $44,741,000 and in 1873 at $67,997,000. From 1873 to 1897 imports from the United Kingdom decreased $38,596,000 or 56·7 p.c. Thus, since the introduction of the British preferential tariff, a downward trend in imports from the United Kingdom has changed to one strongly upward. But, in spite of the encouragement offered by the preferential tariff, a study of the figures in the following table will show that trade with the United Kingdom, and with the British Empire as a whole, has not grown so rapidly as that with foreign countries, with the result that in both imports and exports the percentage of the total trade of Canada carried on with the British Empire has declined. The proportion of trade with parts of the Empire other than the United Kingdom has increased but not sufficiently to overcome the decreased percentage with the United Kingdom. However, during the two latest years the proportion of trade with both the United Kingdom and the total British Empire showed a distinctly upward trend, especially in imports, but in exports also, although both the volume and direction of Canada's exports vary widely with the vicissitudes of crops here and in other parts of the world.

In the interpretation of statistics covering a long period such as those in the table following, the wide fluctuations in price levels should be borne in mind. Thus the fiscal year 1896, just prior to the introduction of the British preference, marked about the close of a long period of declining prices which began in the '70's. Prices followed a rising trend from then to the last pre-war fiscal year 1914, and rose very steeply throughout the War to a peak in the fiscal year ended 1921. In the following year, 1922, prices suffered a sudden drop and then remained fairly steady until 1929, since when the recent serious decline has occurred. (See Chapter XX). The trade of Canada with the British Empire in certain fiscal years was as under:—

TRADE OF CANADA WITH THE BRITISH EMPIRE.

Item and Fiscal Year.	Canadian Trade with—			Percentage of Total Trade with—		
	United Kingdom.	Other British Empire.	Total British Empire.	United Kingdom.	Other British Empire.	Total British Empire.
	$	$	$	p.c.	p.c.	p.c.
IMPORTS.						
1886	39,033,006	2,383,560	41,416,566	40·7	2·5	43·2
1896	32,824,505	2,388,647	35,213,152	31·2	2·2	33·4
1906	69,183,915	14,605,519	83,789,434	24·4	5·1	29·5
1914	132,070,406	22,456,440	154,526,846	21·4	3·6	25·0
1921	213,973,562	52,029,126	266,002,688	17·3	4·2	21·5
1922	117,135,343	31,973,910	149,109,253	15·7	4·3	20·0
1926	163,731,210	45,088,918	208,820,128	17·6	4·9	22·5
1929	194,041,381	63,346,829	257,388,210	15·3	5·0	20·3
1930	189,179,738	63,494,864	252,674,602	15·2	5·1	20·2
1931	149,497,392	56,491,896	204,898,426	16·5	6·2	22·7
1932	106,371,779	41,440,214	147,811,993	18·4	7·2	25·6
EXPORTS (Canadian).						
1886	36,694,263	3,262,803	39,957,066	47·2	4·2	51·4
1896	62,717,941	4,048,198	66,766,139	57·2	3·7	60·9
1906	127,456,465	10,964,757	138,421,222	54·2	4·5	58·7
1914	215,253,969	23,388,548	238,642,517	49·9	5·4	55·3
1921	312,844,871	90,607,348	403,452,219	26·3	7·6	33·9
1922	299,361,675	46,473,735	345,835,410	40·4	6·3	46·7
1926	508,237,560	90,330,435	598,567,995	38·7	6·9	45·6
1929	429,730,485	106,258,803	535,989,288	31·5	7·8	39·3
1930	281,745,965	97,825,173	379,571,138	25·2	8·8	33·9
1931	219,246,499	73,617,897	292,864,396	27·4	9·2	36·6
1932	174,043,725	44,912,662	218,956,387	30·2	7·8	38·0

Subsection 4.—Trade with the United States and other Foreign Countries.

Trade with the United States.—During the fiscal year 1932 nearly 61 p.c. of Canadian imports came from the United States, including large importations, though greatly reduced from the previous year, in all the nine main groups of commodities.

Iron and its products was again the leading group, including machinery, automobiles and parts, rolling-mill products, etc., while non-metallic minerals, chiefly coal and petroleum products, were second in importance. The total values of these main groups of imports, arranged in order of importance, with the decrease in 1932 compared with 1931, were: (1) iron and its products, $81,005,384, decrease $86,669,335 or 51·7 p.c.; (2) non-metallic mineral products, $77,871,155, decrease $41,113,263 or 34·6 p.c.; (3) agricultural and vegetable products, $44,578,848, decrease $23,001,533 or 34·0 p.c.; (4) fibres, textiles and textile products, $30,944,027, decrease $17,300,392 or 35·8 p.c.; (5) miscellaneous commodities, $30,131,580, decrease $15,136,929 or 33·4 p.c.; (6) non-ferrous metal products, $27,026,602, decrease $22,134,515 or 45·0 p.c.; (7) wood, wood products and paper, $25,584,827, decrease $12,553,201 or 32·9 p.c.; (8) chemicals and allied products, $20,359,822, decrease $2,842,170 or 12·2 p.c.; and (9) animals and animal products, $14,184,530, decrease $11,968,905 or 45·8 p.c. Among commodities, the leading imports were: coal, machinery, crude petroleum, automobile parts, fresh fruits, gasolene, raw cotton, iron plates and sheets, settlers' effects, engines and boilers, and raw silk. Raw silk was the only one of these in which the value of imports increased even slightly over the previous year. All the others, together with automobiles and farm implements, showed large reductions compared with the previous year.

Among Canadian exports to the United States the wood and paper products group is by far the most important. Indeed newsprint paper constituted about 38 p.c. of the total value of these exports in the fiscal year 1932. Other large items in this group, such as wood pulp, planks and boards, pulpwood and numerous other less important wood and paper products, made the exports under this group as a whole amount to 60 p.c. of the total exports to the United States, as compared with only 54 p.c. in the previous year, so that, while exports of all these important commodities were of reduced value, the reduction was not so great proportionately as in other exports. Non-ferrous metals was still the second most important group of exports, although the value of exports to the United States under this group made a further decline of 38 p.c. due to large reductions in exports of raw gold, copper, nickel, and silver and aluminium. The total values of the nine main groups of domestic exports, arranged in order of importance, with the decrease in 1932 compared with 1931, were: (1) wood, wood products and paper, $140,473,352, decrease $48,476,056 or 25·6 p.c.; (2) non-ferrous metal products, $36,176,490, decrease $22,659,193 or 38·5 p.c.; (3) animals and animal products, $22,342,515, decrease $11,725,893 or 34·4 p.c.; (4) agricultural and vegetable products, $11,035,258, decrease $16,609,-

116 or 60·1 p.c.; (5) non-metallic mineral products, $8,233,323, decrease $5,021,935 or 37·8 p.c.; (6) miscellaneous commodities, $7,960,570, decrease $4,398,520 or 35·6 p.c.; (7) chemicals and allied products, $4,123,489, decrease $2,238,202 or 35·2 p.c.; (8) iron and its products, $3,097,883, decrease $3,020,237 or 49·3 p.c.; and (9) fibres, textiles and textile products, $1,743,794, decrease $324,737 or 15·7 p.c.

The total trade of Canada with the United States in the fiscal year 1932 was 37·1 p.c. less than in 1931 and 56·9 p.c. less than in 1930. Imports decreased 39·8 p.c. from 1931 and 58·5 p.c. from 1930, while exports were 32·9 p.c. less than in 1931 and 54·5 p.c. less than in 1930.

For a more detailed treatment of the commodities making up our export and import trade with the United States, see Tables **12** and **13** of this chapter.

Canadian Trade via the United States.—Imports from overseas countries *via* the United States have steadily declined in recent years, especially those from the British Empire. This decrease has followed: (1) general propaganda to utilize Canadian sea and river ports, (2) additional concessions to goods imported under the preferential tariff if they come direct. Provision has been made, in trade treaties and agreements negotiated with foreign countries, that goods must be imported *via* a Canadian sea or river port in order to obtain the full benefits of special rates of duty. Between 1920 and 1932 imports *via* the United States have decreased from 9·5 p.c. to 2·2 p.c. of the total imports from overseas countries.

The proportion of exports from Canada to overseas countries *via* the United States shows a slight decline since 1927, the percentages for the past eleven fiscal years being: 1922, 32·8; 1923, 41·1; 1924, 36·2; 1925, 39·3; 1926, 39·2; 1927, 39·5; 1928, 38·9; 1929, 36·7; 1930, 33·8; 1931, 27·5 and 1932, 18·7. The decline has thus been very marked in the latest year. Details by countries are given in Table **21** of this chapter.

Trade with Other Foreign Countries.—The relative changes in the positions occupied by the United States and other foreign countries in Canada's trade in various years from 1886 to 1932 are shown in the following table. Imports from the United States increased from 44·6 p.c. of total imports in 1886 to 64 p.c. in 1914. During the War and the years immediately following, when production and exports by many European countries were curtailed, imports from the United States rose to a high proportion and were 69 p.c. in 1921, while those from other foreign countries declined. With this exception the proportion of imports from other foreign countries has remained surprisingly constant over the period of nearly half a century, although in the two latest years there has been a tendency for the proportion of total imports from the United States to decline, while that from other foreign countries has risen slightly. In the case of Canadian exports, on the other hand, those to the United States have fluctuated between 34 p.c. and 46 p.c. of the total, while those to other foreign countries have increased from 4·5 p.c. to 21 p.c. of total Canadian exports.

TRADE OF CANADA WITH THE UNITED STATES AND OTHER FOREIGN COUNTRIES.

Item and Fiscal Year.	Canadian Trade with—			Percentage of Total Trade with—		
	United States.	Other Foreign Countries.	Total Foreign Countries.	United States.	Other Foreign Countries.	Total Foreign Countries.
Imports.	$	$	$	p.c.	p.c.	p.c.
1886	42,818,651	11,756,920	54,575,571	44·6	12·2	56·8
1896	53,529,390	16,618,619	70,148,009	50·8	15·8	66·6
1906	169,256,452	30,694,394	199,950,846	59·6	10·9	70·5
1914	396,302,138	68,365,014	464,667,152	64·0	11·0	75·0
1921	856,176,820	117,979,374	974,156,194	69·0	9·5	78·5
1922	515,958,196	82,736,883	598,695,079	69·0	11·0	80·0
1926	608,618,542	109,890,062	718,508,604	65·6	11·9	77·5
1929	868,012,229	140,278,652	1,008,290,881	68·6	11·1	79·7
1930	847,442,037	148,156,943	995,598,980	67·9	11·8	79·7
1931	584,407,018	117,307,251	701,714,269	64·5	12·9	77·4
1932	351,686,775	79,005,136	430,691,911	60·8	13·6	74·4
Exports (Canadian).						
1886	34,284,490	3,515,148	37,799,638	44·1	4·5	48·6
1896	37,789,481	5,152,185	42,941,666	34·4	4·7	39·1
1906	83,546,306	13,516,428	97,062.734	35·5	5·8	41·3
1914	163,372,825	29,573,097	192,945,922	37·9	6·8	44·7
1921	542,322,967	243,388,515	785,711,482	45·6	20·5	66·1
1922	292,588,643	101,816,627	394,405,270	39·5	13·8	53·3
1926	474,987,367	241,800,429	716,787,796	36·1	18·3	54·4
1929	499,612,145	328,108,239	827,720,384	36·7	24·0	60·7
1930	515,049,763	225,637,401	740,687,164	46·0	20·0	66·0
1931	349,660,563	157,217,708	506,878,271	43·7	19·7	63·4
1932	235,186,674	122;201,241	357,387,915	40·8	21·2	62·0

With further reference to the trade of Canada with countries other than the United Kingdom and the United States, attention is directed to Tables 10 to 36 (pp. 132-165) of the Condensed Preliminary Report on the Trade of Canada, 1932, published by the Dominion Bureau of Statistics and giving the trade of Canada in leading commodities with 81 British and foreign countries for the fiscal years 1931 and 1932.

Subsection 5.—Geographical Distribution of Canadian Trade by Continents and Countries.

Geographical Distribution of Canadian Trade by Continents.—During the fiscal year ended Mar. 31, 1932, values of exports to all continents were reduced as compared with the previous year. Canada again sold more goods to North America than to Europe, although the proportion to Europe increased considerably, there being increased proportions to both the United Kingdom and 'other Europe', while the proportion to North America (both the United States and other North America) and the other continents decreased. Imports declined in value from every continent as well as the two leading individual countries. North America was again the chief source of imports, providing 64 p.c. of the total. The proportions of imports supplied by Europe, other North America, South America, Asia, Oceania and Africa increased, while the proportion from the United States decreased. Summary statistics are given in the following statement:—

TRADE OF CANADA, BY CONTINENTS, 1926, 1931 AND 1932.

(With proportion of Trade with each Continent.)

Continent.	Imports for Consumption.						Exports (Canadian).					
	Values (Million $).			Percentages of Totals.			Values (Million $).			Percentages of Totals.		
	1926.	1931.	1932.	1926.	1931.	1932.	1926.	1931.	1932.	1926.	1931.	1932.
Europe	223·4	224·2	157·0	24·1	24·7	27·1	648·5	309·2	251·2	49·3	38·7	43·6
United Kingdom	163·7	149·5	106·4	17·6	16·5	18·4	508·2	219·2	174·0	38·6	27·4	30·2
Other Europe	59·7	74·7	50·6	6·5	8·2	8·7	140·3	90·0	77·2	10·7	11·3	13·4
North America	644·7	607·8	369·3	69·5	67·1	63·8	516·2	395·4	266·8	39·2	49·4	46·3
United States	609·8	584·4	351·7	65·7	64·5	60·8	474·9	349·6	235·2	36·1	43·7	40·8
Other North America	34·9	23·4	17·6	3·8	2·6	3·0	41·3	45·8	31·6	3·1	5·7	5·5
South America	17·1	25·6	17·3	1·9	2·9	3·0	27·4	20·6	8·9	2·1	2·6	1·5
Asia	32·7	27·7	18·8	3·5	3·0	3·3	77·2	39·4	28·3	5·9	4·9	4·9
Oceania	8·7	14·4	9·5	0·9	1·6	1·7	32·6	20·0	10·2	2·5	2·5	1·8
Africa	0·8	6·9	6·6	0·1	0·7	1·1	13·3	15·0	10·9	1·0	1·9	1·9
Totals	927·4	906·6	578·5	100·0	100·0	100·0	1,315·2	799·6	576·3	100·0	100·0	100·0

Imports from Principal Countries.—The relative order of the four leading countries which supplied Canada with goods in the fiscal year ended Mar. 31, 1932, was unchanged from 1929 to 1931, although in every case the value shows a heavy decrease. The principal countries from which Canada increased her imports over the previous year were Australia (raisins and currants, canned fruits, sugar, worsted tops, etc.), British South Africa (fruits, corn and sugar), Trinidad and Tobago (sugar), and British Guiana (sugar). With the depression in world trade, imports from most countries fell off, but disproportionately large reductions, that is, reductions in the percentage of imports, occurred in imports from New Zealand (butter and other animal products), Argentina (corn and flaxseed) and the United States. In appraising changes over the ten-year period shown by the comparison with the imports of 1922, the great decline in prices should be kept in mind as well as the effects of the current trade depression. Thus, apropos of the price decline, while the value of imports from the United Kingdom was about 10 p.c. less in 1932 than 1922, the average import valuations had declined over 40 p.c. in the same period, so that undoubtedly imports from the United Kingdom were in larger volume in 1932 than ten years before, and the same, though to a less degree, holds true with imports from the United States and Japan. But from many countries imports were greater in value in 1932 than 1922. The most important of these were Germany, Australia, Colombia and British South Africa, while imports were also greater in a less marked degree from the Netherlands, Belgium, Jamaica, Italy, China, Trinidad and Tobago, and Czechoslovakia. On the other hand, imports have declined greatly from Switzerland, Peru, Mexico and Hong Kong, while the diversion of imports of raw sugar and other tropical products from Cuba and Santo Domingo to countries willing to make more favourable trade agreements with Canada, such as the British West Indies, British Africa and the Fiji Islands, has resulted in Cuba dropping from 4th to 31st place.

CANADA'S IMPORTS FROM THIRTY-FIVE LEADING COUNTRIES, 1932.

NOTE.—Countries arranged in order of importance, 1932.

Rank.			Country.	Value of Imports.	Increase (+) or Decrease (−) 1932 Compared with—		Percentage of Imports.	
1922	1931	1932			1922.	1931.	1922.	1932.
				$	$	$	p.c.	p.c.
1	1	1	United States	351,686,775	− 164,271,421	− 232,720,243	69·0	60·8
2	2	2	United Kingdom	106,371,779	− 10,763,564	− 43,125,613	15·7	18·4
3	3	3	France	13,570,141	+ 88,136	− 5,433,961	1·8	2·3
18	4	4	Germany	11,657,869	+ 9,616,053	− 4,539,167	0·3	2·0
6	5	5	Japan	5,990,401	− 2,204,280	− 3,352,566	1·1	1·0
10	8	6	Netherlands	5,827,969	+ 1,825,922	− 1,459,163	0·5	1·0
29	16	7	Australia	5,696,770	+ 4,617,446	+ 1,080,048	0·1	1·0
9	6	8	British India	5,099,736	− 180,121	− 3,326,980	0·7	0·9
11	7	9	Belgium	5,047,721	+ 1,202,003	− 3,372,298	0·5	0·9
30	13	10	Colombia	5,035,311	+ 4,674,802	− 1,587	0·1	0·9
8	18	11	British Guiana	4,541,922	− 1,624,742	+ 253,765	0·8	0·8
15	15	12	Jamaica	4,406,024	+ 2,190,493	− 386,575	0·3	0·8
33	20	13	British South Africa	4,323,169	+ 4,195,431	+ 993,641	–	0·8
27	12	14	Italy	4,193,437	+ 2,806,067	− 855,520	0·2	0·7
25	14	15	China	3,725,558	+ 2,312,031	− 1,085,256	0·2	0·6
5	11	16	Switzerland	3,687,517	− 4,984,091	− 1,796,946	1·2	0·6
7	17	17	Peru	3,515,589	− 3,467,814	− 1,019,935	0·9	0·6
22	27	18	Trinidad and Tobago	3,124,902	+ 1,446,244	+ 803,895	0·2	0·5
31	21	19	Czechoslovakia	2,759,864	+ 2,407,940	− 426,523	–	0·5
13	19	20	Barbados	2,673,435	− 321,124	− 1,591,073	0·4	0·5
14	9	21	Argentina	2,608,363	− 253,263	− 4,131,334	0·3	0·4
19	22	22	Fiji	2,606,430	+ 640,250	− 200,925	0·3	0·4
16	23	23	Ceylon	1,573,916	− 613,413	− 1,134,929	0·3	0·3
28	24	24	Other British West Indies	1,560,516	+ 335,491	− 1,011,389	0·2	0·3
35	31	25	Dutch West Indies	1,499,701	+ 1,498,196	− 339,263	–	0·3
26	25	26	Newfoundland	1,483,881	+ 91,855	− 1,017,880	0·2	0·3
21	30	27	Spain	1,476,630	− 302,778	− 484,129	0·2	0·3
34	28	28	British East Africa	1,436,338	+ 1,429,228	− 645,787	–	0·2
20	10	29	New Zealand	1,080,230	− 703,270	− 5,591,022	0·2	0·2
23	32	30	Brazil	982,544	− 512,701	− 366,580	0·2	0·2
4	26	31	Cuba	981,091	− 12,061,477	− 1,427,556	1·7	0·2
32	29	32	Sweden	879,476	+ 634,181	− 1,157,981	–	0·1
12	34	33	Mexico	788,447	− 3,009,755	+ 19,124	0·5	0·1
17	33	34	Hong Kong	660,939	− 1,448,798	− 172,669	0·3	0·1
24	35	35	Straits Settlements	550,777	− 903,965	− 216,085	0·2	0·1
			Totals, Above 35 Countries	573,105,168	− 165,614,808	− 319,240,462	98·7	99·1
			Totals, All Countries	578,503,904	− 169,300,428	− 328,108,791	100·0	100·0
			British Empire	147,811,993	− 1,297,260	− 57,131,958	19·9	25·5
			Foreign Countries	430,691,911	− 168,003,168	− 270,976,833	80·1	74·5

Exports to Principal Countries.—After a decline in 1931 Canada's exports to most of the principal countries showed a further falling off in the fiscal year 1932 as compared with 1931, the contraction being due to a serious decline in commodity prices as well as reduced volume. Exceptions to the general rule in the latest year occurred in the cases of France, due to large increases in the exports of wheat, the Netherlands and Denmark, due to increased exports of grains, and Norway, due to copper-nickel matte. As a result France rose from 6th to 3rd place among the nations as a market for Canada. The United States and the United Kingdom retained first and second places respectively with Japan in 4th place, in spite of the fact that there was a considerable reduction in the value of exports in each case. The percentages of exports in 1932 over 1931 increased to the United Kingdom, France, Japan, Belgium, Netherlands, Germany, British South Africa, Denmark, and Norway, while percentages decreased to the United States, Newfoundland, China, Argentina, Italy, New Zealand, and British India, exports to Italy, Argentina and New Zealand showing disproportionately large decreases. During the ten-year period covered by comparisons with 1922, exports to many countries have increased in value despite the great decline in commodity prices in the interval. Most important among the countries to which exports have increased in value and percentage are: France, Japan, Belgium, Netherlands, Germany, St. Pierre and Miquelon, British South Africa, and China. On the other hand, exports to each of our two principal customers, the United States and the United Kingdom, were lower in value in 1932 than in 1922; in the case of the latter the decline in value was 42 p.c. and the decline in the proportion to total exports was from 40 p.c. to 30 p.c. Other countries which took a decreased proportion of Canada's exports in 1932, as compared with 1922, were Newfoundland, Australia, Italy, Greece, Trinidad and Tobago, Cuba, and British Guiana.

CANADA'S DOMESTIC EXPORTS TO FORTY LEADING COUNTRIES, 1932.

NOTE.—Countries arranged in order of importance, 1932.

Rank.			Country.	Value of Exports.	Increase (+) or Decrease (−) 1932 Compared with—		Percentage of Exports.	
1922	1931	1932			1922.	1931.	1922.	1932.
				$	$	$	p.c.	p.c.
2	1	1	United States	235,186,674	− 57,401,969	− 114,473,889	39·5	40·8
1	2	2	United Kingdom	174,043,725	− 125,317,950	− 45,202,774	40·4	30·2
9	6	3	France	17,954,321	+ 9,746,093	+ 4,668,563	1·1	3·1
4	3	4	Japan	16,555,690	+ 1,724,170	− 2,403,275	2·0	2·9
5	4	5	Belgium	14,036,437	+ 1,677,137	− 925,607	1·7	2·4
7	11	6	Netherlands	13,502,157	+ 3,919,233	+ 3,024,604	1·3	2·3
12	7	7	Germany	10,405,256	+ 5,895,709	− 2,536,980	0·6	1·8
35	9	8	St. Pierre and Miquelon	8,642,119	+ 8,212,929	− 2,362,360	0·1	1·5
16	12	9	British South Africa	8,401,496	+ 4,511,106	− 1,885,444	0·5	1·5
8	10	10	Newfoundland	6,601,852	− 2,715,787	− 4,056,785	1·3	1·1
22	14	11	China	5,908,133	+ 4,007,506	− 3,214,057	0·3	1·0
6	16	12	Australia	5,387,982	− 5,290,618	− 1,400,726	1·4	0·9
17	13	13	Argentina	4,344,735	+ 1,111,312	− 5,663,059	0·4	0·8
3	5	14	Italy	4,265,324	− 11,070,494	− 10,286,995	2·1	0·7
19	20	15	Denmark	3,875,680	+ 1,632,499	+ 271,188	0·3	0·7
13	8	16	New Zealand	3,724,225	− 404,306	− 8,964,250	0·6	0·7
15	21	17	Norway	3,324,772	− 588,600	+ 19,438	0·5	0·6
24	15	18	British India	3,041,522	+ 1,404,377	− 3,915,528	0·2	0·5
[1]	25	19	Irish Free State	2,661,421	+ 2,661,421	− 103,068	[1]	0·5
20	19	20	Jamaica	2,634,699	+ 420,535	− 1,114,695	0·3	0·5
10	17	21	Greece	2,412,035	− 2,835,000	− 3,230,210	0·7	0·4
23	18	22	Other British West Indies	2,398,372	+ 560,584	− 1,875,533	0·2	0·4
28	27	23	Sweden	2,385,789	+ 1,165,593	− 61,416	0·2	0·4
11	22	24	Trinidad and Tobago	2,147,637	− 2,400,898	− 1,138,433	0·6	0·4
30	26	25	Bermuda	1,948,898	+ 959,755	− 543,362	0·1	0·3
14	23	26	Cuba	1,637,676	− 2,336,756	− 1,230,427	0·5	0·3
25	29	27	Hong Kong	1,434,659	+ 22,960	− 527,195	0·2	0·2
29	28	28	Mexico	1,366,947	+ 169,350	− 668,629	0·2	0·2
26	36	29	Barbados	1,092,425	− 285,559	− 26,178	0·2	0·2
36	37	30	Portuguese Africa	1,063,283	+ 888,254	− 46,452	–	0·2
37	30	31	British Honduras	1,008,412	+ 857,448	− 734,052	–	0·2
21	24	32	Brazil	979,854	− 1,022,595	− 1,819,713	0·3	0·2
18	35	33	British Guiana	778,469	− 1,519,636	− 361,446	0·3	0·1
33	32	34	Finland	666,459	+ 62,448	− 722,097	0·1	0·1
39	31	35	Peru	628,167	+ 556,484	− 951,127	–	0·1
32	33	36	Spain	566,103	− 250,874	− 730,977	0·1	0·1
34	38	37	Venezuela	549,827	+ 37,328	− 508,396	0·1	0·1
38	34	38	Colombia	533,891	+ 406,692	− 658,049	–	0·1
31	39	39	Dutch East Indies	507,258	− 444,311	− 446,520	0·1	0·1
27	40	40	Puerto Rico	450,184	− 851,795	− 226,934	0·2	0·1
			Totals, Above 40 Countries	569,054,565	− 162,126,225	− 217,032,845	98·7	98·7
			Totals, All Countries	576,344,302	− 163,896,378	− 223,398,365	100·0	100·0
			British Empire	218,956,387	− 126,879,023	− 73,908,009	46·7	38·0
			Foreign Countries	357,387,915	− 37,017,355	− 149,490,356	53·3	62·0

[1] The United Kingdom included the Irish Free State in 1922.

Statistical Tables of Trade by Countries.—Statistics showing the course of import and export trade during the latest five fiscal years, by countries with which Canada carries on trade, will be found in Tables **19** (imports) and **20** (exports). Table **21** shows by countries the values of goods imported into and exported from Canada *via* the United States for the latest two fiscal years.

A series of tables showing Canadian trade in principal commodities with the leading countries with which she trades (other than the United Kingdom and the United States, which are exhaustively dealt with in Tables **12** and **13**) followed Table **21** in the 1931 Year Book. These tables have been omitted in the present edition to economize space. They will be found in the Condensed Preliminary Report on the Trade of Canada, 1932 (pp. 132-165), while historical tables showing our trade with these and other countries in each year since Confederation will be found on pp. 14-19 of the Annual Report of the Trade of Canada for 1932, both published by, and obtainable from, the Dominion Bureau of Statistics.

Subsection 6.—Principal Commodities Imported and Exported.

While Canadian imports and exports in all the principal groups show a decrease in value in the fiscal year 1932 as compared with 1931, imports were still greater than exports in the textile, iron, non-metallic mineral, chemical and miscellaneous groups, while exports predominated in the agricultural, animal, wood and non-ferrous metal groups. Nevertheless, the largest group of imports was that of agricultural and vegetable products, followed by non-metallic minerals, iron and textiles. In 1931 the iron group of imports was the highest, while as recently as 1929 imports of iron products exceeded those of vegetable products by 50 p.c. But the decline since then has affected the imports of iron products much more than those of vegetable and of non-metallic mineral products. In the fiscal year 1932, as compared with 1931, total imports declined 36 p.c. but imports of iron products declined 49 p.c., textiles 36 p.c., non-metallic minerals 34 p.c. and vegetable products 28 p.c. In domestic exports, while the average decline from the previous fiscal year was 28 p.c., exports of vegetable products dropped 30 p.c., non-ferrous metals 28 p.c., wood and paper products 24 p.c. and animal products 18 p.c.

For further information respecting Canada's trade in principal commodities with all countries, fiscal years 1929-32, see Table **13** for imports and Table **12** for exports.

Canada's Principal Imports.—The statement which follows shows the principal commodities imported into Canada in the fiscal years 1890, 1900, 1910, 1920, 1930 and 1932, the commodities being arranged in order of importance in 1932. In the interpretation of the trends in imports shown by the figures in this table, the effect of price changes and of fluctuations of the so-called business cycle should be kept in mind. Thus the Bureau of Statistics' index number of wholesale prices on the 1926 base was 59·3 in the calendar year 1889, 52·1 in 1899, 58·5 in 1909, 134·0 in 1919, 95·6 in 1929 and 72·1 in 1931, these calendar years approximating to the fiscal years ended 1890, 1900, 1910, 1920, 1930 and 1932. In the matter of business fluctuations, the fiscal year 1910 was influenced by the general development boom in Western Canada, 1920 was affected by the feverish activity which immediately followed the War, 1930 represented the end of the security inflation period and the beginning of the downturn, while in 1932 the effects of the depression and price decline were being severely felt.

During the period of 42 years covered by the table, great changes have occurred in the character of the leading imports, due to developments both in the industrial organization of the country and the goods consumed by the people. Thus many present-day leading imports such as crude petroleum, automobiles and parts, artificial silk, electric apparatus, aluminium, were in 1890 either non-existent or formed very insignificant items of trade. Imports of farm implements in 1890 amounted to only $161,000 but, due to the tremendous agricultural expansion in Canada since that time as well as to increasing mechanization of agricultural operations, imports of farm implements have grown to a large item in spite of the wide development of their manufacture within the country. On the other hand, a number of the leading imports of 1890, such as woollen goods and raw wool, sugar and products, cotton goods and raw cotton, tea, grain products and meats, have become relatively much less important as imports. Then again, there were certain leading imports in 1890, such as coal, rolling-mill products, machinery and fruits, which still remain among the chief items of imports owing to the absence of coal and high grade iron ore deposits in the central portion of Canada where population and industry are chiefly concentrated, and to the demand for fruits which cannot be grown in Canada.

It is estimated that about one-third of the imports during recent years have been for use in the various industries of the Dominion. The decrease in imports of such commodities in the past three years has been about proportional to the decrease in total imports. Of the leading 62 commodities imported in the fiscal year 1932 for further manufacture in Canada, 49·8 p.c. by value was raw materials, 24·4 p.c. partly manufactured and 25·8 p.c. was classed as fully or chiefly manufactured goods such as automobile parts and engines, rolling-mill products, etc.

CANADA'S LEADING IMPORTS, FISCAL YEARS, 1890, 1900, 1910, 1920, 1930 AND 1932.

(Commodities arranged in order of importance, 1932.)

Commodity.	1890.	1900.	1910.	1920.	1930.	1932.
	$	$	$	$	$	$
Coal	8,013,156	11,012,223	27,516,678	60,072,629	56,812,418	35,501,362
Alcoholic beverages	1,695,161	1,938,112	4,459,566	9,135,536	45,026,487	25,929,880
Machinery	1,877,551	5,159,952	14,690,873	36,716,791	69,117,528	24,387,589
Crude petroleum	–	23,244	1,189,071	20,306,693	50,951,202	24,194,084
Fruits	2,400,851	3,133,407	8,316,462	33,463,270	34,277,882	22,476,232
Sugar and products	6,452,654	8,610,845	14,962,770	73,618,354	27,987,156	22,398,080
Rolling-mill products	5,645,704	11,905,937	15,692,051	39,985,746	61,894,002	20,512,246
Electrical apparatus	317,515	810,900	3,688,538	15,550,254	37,611,263	14,672,423
Petroleum, refined	690,283	830,025	2,326,681	10,566,692	25,180,476	13,471,595
Cotton goods	3,792,584	6,399,705	17,928,093	51,435,017	28,316,037	13,756,029
Automobile parts	–	–	269,586	12,674,823	35,746,929	13,451,825
Books and printed matter	1,404,583	1,588,432	4,127,179	11,228,018	18,130,779	12,609,325
Woollen goods, including carpets	10,900,600	9,427,575	20,767,010	45,545,127	32,632,927	11,848,325
Paper	1,208,683	1,378,749	4,567,810	9,949,574	14,764,904	8,825,141
Settlers' effects	1,810,217	3,065,410	10,273,428	10,181,034	11,181,203	8,262,445
Raw cotton	3,539,249	4,229,198	9,384,801	33,854,457	21,682,463	7,802,044
Flax, hemp and jute	1,416,217	3,551,037	5,340,312	15,923,836	14,995,198	7,671,578
Vegetable oil	612,671	826,882	1,862,265	15,973,417	12,244,151	7,644,017
Grain and grain products	3,034,049	8,298,884	7,806,665	9,086,073	25,082,671	7,585,738
Engines and boilers	188,759	778,364	2,019,558	12,997,757	15,146,437	7,210,249
Clay and products	948,876	1,593,255	3,418,844	6,371,567	12,256,769	7,195,457
Tea	3,073,643	3,604,027	5,347,854	8,336,163	10,694,379	7,125,314
Vegetables	337,859	625,749	1,751,265	5,722,600	11,040,765	6,746,722
Raw silk	193,529	277,708	393,011	3,090,845	8,360,968	6,499,154
Silk goods	2,654,505	3,880,535	5,590,829	31,341,944	19,606,589	6,404,808
Rubber and products	1,512,427	2,942,044	6,151,157	18,059,435	20,025,316	6,271,708
Leather	1,173,777	1,879,333	4,202,934	17,102,702	11,537,331	6,198,308
Wood, unmanufactured	1,444,727	3,775,240	8,324,585	14,112,391	15,348,150	5,755,866
Glass and glassware	1,268,314	1,658,694	2,932,104	6,926,459	10,453,706	5,744,616

CANADA'S LEADING IMPORTS, FISCAL YEARS, 1890, 1900, 1910, 1920, 1930 AND 1932 —concluded.

(Commodities arranged in order of importance, 1932.)

Commodity.	1890.	1900.	1910.	1920.	1930.	1932.
	$	$	$	$	$	$
Furs	1,058,001	2,106,441	5,768,075	12,877,520	11,953,949	5,070,008
Wood, manufactured	1,355,230	824,195	3,085,079	7,893,284	12,707,244	4,817,836
Automobiles	-	-	1,732,215	15,035,545	34,464,666	4,755,753
Aluminium	159	12,543	794,490	2,747,385	6,058,864	4,746,334
Artificial silk goods	-	-	-	477,754[1]	11,740,460	4,117,419
Tobacco, raw	1,344,985	1,508,359	3,229,239	13,604,757	6,471,626	3,861,465
Stone and products	862,037	1,029,711	1,773,953	3,687,702	8,702,988	3,793,045
Coffee, green	591,158	491,148	1,194,061	4,711,079	5,924,635	3,674,413
Nuts (edible)	231,449	400,441	1,237,292	5,889,573	5,095,109	3,646,143
Dyeing and tanning materials	484,217	711,508	1,412,099	5,623,720	3,548,656	3,445,810
Fertilizers	14,444	88,974	5,395,423	1,796,752	5,033,592	3,367,752
Scientific and educational equipment	200,495	364,198	1,118,437	3,282,803	4,956,519	3,323,829
Farm implements	161,277	2,148,867	2,661,207	14,578,106	30,075,453	3,315,542
Paints and varnishes	672,885	1,012,535	1,376,023	3,821,880	5,957,078	3,291,342
Brass and products	554,545	851,606	2,228,215	4,531,015	7,000,455	3,195,481
Drugs and medicines	513,331	481,359	962,083	3,402,932	3,808,721	3,104,482
Coke	155,513	506,839	1,695,603	2,476,450	6,403,354	3,085,932
Hides and skins, raw	1,703,093	4,214,012	8,235,819	22,654,661	8,402,075	2,867,945
Soda and sodium compounds	329,084	624,873	785,524	2,982,371	4,410,621	2,855,881
Noils and tops	12,100	151,510	599,446	5,830,957	3,833,801	2,844,145
Woollen yarn	117,729	402,328	1,671,765	4,445,240	5,870,353	2,642,966
Cellulose products	19,715	46,779	265,131	1,122,057	2,787,612	2,631,038
Hardware and cutlery	1,250,369	1,434,209	1,937,647	4,210,142	4,950,119	2,469,475
Cotton yarn	17,879	321,348	767,760	4,078,510	3,827,867	2,383,993
Raw wool	1,729,058	1,574,834	1,587,175	7,672,211	4,306,945	2,262,261
Sulphur	44,276	215,433	430,632	1,296,458	3,823,245	2,226,934
Refrigerators	-	-	22,626	33,886	1,913,591	2,156,831
Fish	899,683	1,060,708	1,630,744	3,491,678	3,474,921	1,881,313
Manila and sisal fibre	-	-	1,548,457	5,195,812	3,822,613	1,855,712
Castings and forgings	268,463	538,612	1,027,460	6,519,188	4,497,406	1,827,548
Clocks and watches	773,538	698,378	1,459,617	3,126,267	3,495,659	1,763,763
Animals, living	823,440	1,160,151	3,118,217	2,570,377	2,802,754	1,722,489
Iron ore	551	282,191	3,345,550	4,601,716	5,020,921	1,698,983
Cocoa and chocolate	118,569	286,363	1,130,335	7,626,745	3,651,425	1,697,351
Meats	1,632,143	1,371,184	2,427,901	22,100,333	7,599,473	1,689,749
Tubes and pipes (iron)	484,008	1,122,987	2,358,848	4,160,378	5,948,162	1,654,609
Seeds	478,397	1,916,994	1,167,321	4,210,782	5,061,255	1,643,165
Gums and resins	159,508	287,276	2,256,307	4,987,716	3,431,591	1,601,635
Copper and products	484,189	1,271,270	3,488,260	8,568,035	14,898,632	1,580,955
Binder twine	5,159	866,892	1,772,585	3,490,524	1,845,305	1,521,773
Toys and dolls	172,782	199,305	497,210	1,534,728	2,691,408	1,494,839
Hats and caps	1,258,409	1,637,422	3,420,609	4,216,333	2,908,340	1,396,497
Wire, iron	387,490	1,844,788	3,530,226	5,843,623	3,658,798	1,347,425
Nickel plated ware	13,578	18,843	573,591	1,630,047	3,022,935	1,132,393
Jewellery	444,137	578,963	1,337,431	1,242,010	2,435,869	1,091,547
Tools	427,305	825,541	891,820	2,050,286	3,192,449	1,078,492
Tin in blocks, etc	266,463	580,855	1,005,467	2,662,728	2,488,074	975,274
Artificial silk, yarns, etc	-	-	160,586[2]	1,436,738	1,678,450	927,742
Soap	140,232	449,341	811,669	1,534,082	1,316,418	889,342
Diamonds, unset	110,480	451,792	1,902,710	4,470,846	3,193,871	711,034
Musical instruments	434,814	390,407	1,207,592	4,329,093	3,130,873	670,970
Butter	62,212	290,220	92,934	176,994	14,471,688	268,336

[1] Imports for 1924, the first year recorded. [2] For 1913, the first year recorded.

Canada's Principal Exports.—The statement which follows gives Canada's leading domestic exports for the fiscal years ended 1890, 1900, 1910, 1920, 1930 and 1932, arranged in descending order of importance in 1932. In the interpretation of these figures of exports over the 40-year period, the same qualifications should apply regarding price changes and business fluctuations as cited in the case of imports (p. 506).

Over the period of 42 years covered by the table, the changes in Canada's exports have been very great, both in volume and in the relative importance of commodities. The great agricultural expansion of the Canadian West had scarcely begun in 1890. The leading exports then were sawmill and timber products, cheese, fish, cattle, barley, coal and furs, indicating the large dependence of Canadian production at that time upon the eastern forests, mixed-farming areas, and fisheries. Of the five leading exports in 1932 four were very unimportant in 1890. The year 1910 is the first year in this table in which wheat appears as the leading export although this first occurred in 1906. The rise of the great pulp and paper industry to a leading position has been still more recent, and similarly with regard to the production of non-ferrous metals, automobiles and rubber tires. On the other hand, exports of the products of mixed-farming operations, such as cattle, meats, hides, cheese and butter, while showing wide fluctuations, have not expanded proportionately, and in some cases were little or no greater in 1932 than in 1890. Much of the new agricultural area developed since 1890 has been better adapted to grain growing than to mixed-farming operations, so that, with the growth of population, the production of the older mixed-farming districts is to a larger extent consumed within the country. The rising importance during the two past decades of the mining and metallurgical industries producing non-ferrous metals in Canada is illustrated in this table by the increased importance since 1910 of exports of gold, copper, nickel, zinc, silver, lead, aluminium and platinum. Gold refined in Canada and exported as bullion is not shown in the table.

CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS, 1890, 1900, 1910, 1920, 1930 AND 1932.

(Commodities arranged in order of importance, 1932.)

Commodity.	1890.	1900.	1910.	1920.	1930.	1932.
	$	$	$	$	$	$
Wheat	388,861	11,995,488	52,609,351	185,044,806	215,753,475	115,739,383
Newsprint paper	–	–	2,612,243	53,640,122	145,610,519	103,003,352
Wood pulp	168,180	1,816,016	5,204,597	41,383,482	44,704,958	27,684,782
Fish	8,099,674	10,564,688	15,179,015	40,687,172	34,767,739	23,594,230
Wheat flour	521,383	2,791,885	14,859,854	94,262,922	45,457,195	18,897,543
Planks and boards	17,637,308	22,015,990	33,100,387	75,216,193	49,446,887	18,766,452
Gold, raw	657,022	14,148,543	6,016,126	5,974,334	34,375,003	13,671,565
Copper bars, etc	–	–	–	541,338	48,181	13,057,733
Furs, raw	1,874,327	2,264,580	3,749,005	20,628,109	18,706,311	12,110,157
Nickel	240,499[1]	1,040,498	3,320,054	9,039,221	25,034,975	12,109,400
Whiskey	25,383	396,671	1,010,657	1,504,132	25,856,136	11,622,256
Cheese	9,372,212	19,856,324	21,607,692	36,336,863	18,278,004	10,593,967
Barley	4,600,409	1,010,425	1,107,732	20,206,972	10,388,735	10,002,911
Pulpwood	80,005	902,772	6,076,628	8,454,803	13,860,209	8,196,144
Fruits (chiefly apples)	1,073,890	3,305,662	5,492,197	8,347,549	9,593,484	7,507,040
Copper ore and blister	133,251	1,387,388	6,023,925	11,871,039	37,735,413	6,346,192
Vegetables (chiefly potatoes)	597,074	503,993	1,534,228	11,656,483	11,240,747	5,554,068
Zinc	–	–	–	950,082	8,366,712	5,261,647
Silver	201,615	1,354,053	15,009,937	14,255,601	11,569,855	5,160,528
Rubber tires	–	–	–	7,395,172	18,153,225	5,152,614
Meats	895,757	13,615,621	8,013,680	96,161,234	15,030,671	4,960,816
Oats	256,156	2,143,179	1,566,612	9,349,455	4,055,855	4,662,335
Asbestos raw	444,159	490,909	1,886,613	8,767,856	12,074,065	4,628,117
Lead	2,000	688,691	529,422	1,193,144	10,637,887	4,441,562
Films	–	–	7,746	1,486,079	4,790,619	4,011,672
Settlers' effects	818,001	1,095,536	2,274,005	7,631,498	6,304,199	3,970,005
Machinery	143,815	446,391	924,510	6,416,591	7,154,706	3,675,623
Cattle	6,949,417	8,704,523	10,792,156	46,064,631	13,119,462	3,634,784
Automobiles	–	–	405,011	14,883,607	35,307,645	3,617,251
Rubber footwear	–	–	129,618	1,750,967	9,986,392	3,611,517
Stone and products	949,158	575,749	955,636	3,531,916	6,909,442	3,254,804
Aluminium in bars, etc	–	–	1,202,723	5,680,871	13,828,010	3,161,608

For footnote see end of table, p. 510.

CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS, 1890, 1900, 1910, 1920, 1930 AND 1932—concluded.

(Commodities arranged in order of importance, 1932.)

Commodity.	1890.	1900.	1910.	1920.	1930.	1932.
	$	$	$	$	$	$
Soda and sodium compounds	–	–	–	1,491,018[2]	4,208,518	2,841,609
Leather, unmanufactured	727,087	1,535,440	1,296,480	11,742,268	6,496,951	2,816,587
Electrical energy	–	–	–	4,590,818[3]	4,028,154	2,710,410
Logs, wood	682,572	760,416	999,681	1,819,083	3,677,917	2,694,267
Oatmeal and rolled oats	254,657	474,991	1,123,861	4,283,772	2,440,968	2,633,632
Tobacco, raw	234	3,661	76,564	130,264	1,504,264	2,536,998
Farm implements	367,198	1,692,155	4,319,385	11,614,400	18,396,688	2,484,965
Cereal foods	–	–	1,689,648	1,087,901	2,431,137	2,405,404
Shingles (wood)	340,872	1,131,506	2,331,443	10,848,602	6,704,494	2,398,489
Butter	340,131	5,122,156	222,927	9,844,359	543,851	2,362,888
Timber, square	4,353,870	2,013,746	934,723	2,148,162	4,235,309	2,150,177
Acids	5,545	67	–	901,397	5,096,529	2,112,967
Rye	220,761	279,286	84,658	3,475,834	1,451,640	2,025,199
Seeds (chiefly flax and clover)	182,200	322,652	4,602,797	9,915,391	3,237,774	1,992,371
Milk, preserved	–	–	541,372	8,517,771	3,262,101	1,980,092
Fertilizers	4,291	51,410	371,315	6,694,037	7,990,313	1,946,185
Coal	2,447,936	4,599,602	5,013,221	13,183,666	3,998,692	1,872,200
Sugar and products	18,101	100,108	153,357	30,695,005	4,798,712	1,753,174
Paper board	–	–	–	4,568,066	2,506,496	1,751,707
Hides and skins, raw	506,402	1,396,907	5,508,185	19,762,646	7,730,914	1,745,331
Petroleum products	15,812	1,653	1,155	1,230,237	2,527,178	1,620,904
Binder twine	–	–	787,251	5,530,908	1,502,421	1,499,366
Platinum concentrates, etc	–	120	61,717	39,058	357,748	1,370,632
Electric apparatus	–	7,460[4]	27,743	424,476	2,521,045	1,297,098
Bran, shorts and middlings	86,225	145,206	1,842,620	2,983,843	2,582,484	1,273,648
Poles, telephone, etc	92,326	48,872	56,177	209,286	3,917,536	1,242,273
Malt	150,380	10,939	11,328	1,320,773	64,736	1,211,448
Tubes and pipe (iron)	–	–	–	2,325,369	2,202,769	1,112,071
Laths (wood)	392,500	749,301	1,882,950	3,668,511	3,095,417	1,095,666
Pigs, ingots, etc., (iron)	–	137,651	228,183	6,595,688	4,727,137	1,085,730
Wrapping paper	–	–	9,098	2,917,197	1,655,568	1,064,923
Brass	–	–	–	1,644,157	2,332,962	889,766
Hardware and cutlery	96,917	325,164	100,085	7,730,826	1,743,096	851,747
Automobile parts	–	–	–	3,097,466	2,298,742	714,222
Hay	1,068,554	1,414,109	1,805,849	4,087,670	2,007,944	523,102
Rolling-mill products	–	–	–	5,071,221	1,681,814	331,812
Aluminium manufactures	–	–	6,008	64,364	2,107,390	281,260
Milk and cream, fresh	–	–	–	1,699,090	5,379,174	181,091
Ale, beer and porter	10,347	6,272	2,687	145,077	1,995,990	24,129

[1] For 1891, the first year recorded. [2] For 1922, the first year separately recorded. [3] For 1927, the first year value was recorded. The amount generated for export in millions of kilowatt hours was 538 in the fiscal year 1911; 950 in 1920; and 1,497 in 1930. [4] For 1903, the first year separately recorded.

Subsection 7.—Trade in Raw and Manufactured Products.

Relation Between Trade in Raw and Manufactured Products.—The industrial development of a country is indicated by the character of the goods it imports and exports. In the early years of Canada's development the imports were made up chiefly of manufactured products and the exports of raw and semi-manufactured products. Since the opening of the twentieth century this has been almost reversed, a large percentage of the imports consisting of raw and semi-manufactured products for use in Canadian manufacturing industries, and the exports consisting to a considerable degree of products which have undergone some process of manufacture. In fact the leading manufactures of Canada are for the processing of those raw materials in the production of which Canada excels and many of these processed domestic products are dependent upon foreign markets for part of their output. Furthermore, as the population of the country grows, the range of elaborated goods formerly imported which may be manufactured on a competitive basis of mass production within the country expands, so that there are now many industries in Canada serving the domestic and even foreign markets, using raw materials which must be imported such as rubber, cotton and sugar. Since the opening of the present century, Canada has passed through much the same stages of development in her economic life as did the United States during the last quarter of the nineteenth century, although the trend in Canada has been more pronounced in increasing the proportion of partly and fully manufactured goods as compared with raw materials exported, rather than in increasing the proportion of raw materials compared with that of partly and fully manufactured goods imported. Since 1929, the rapid decline in commodity prices, which has affected raw materials so much more than manufactured goods, has tended to increase the percentages of both imports and exports of manufactures.

STATEMENT SHOWING PROPORTIONS OF RAW MATERIALS AND PARTLY AND FULLY MANUFACTURED GOODS IMPORTED INTO AND EXPORTED FROM CANADA AND THE UNITED STATES, 1900, 1914 AND 1920–32.

Fiscal Year.	Raw Materials.				Partly Manufactured Goods.				Fully Manufactured Goods.			
	Imports.		Exports.		Imports.		Exports.		Imports.		Exports.	
	Can.	U.S.	Can.	U.S.	Can.	U.S.	Can.	U.S.	Can.	U.S.	Can.	U.S.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1900	24·9	44·0	41·5	40·2	10·6	15·8	7·7	11·2	64·5	40·2	40·8	48·6
1914	21·8	46·5	63·2	39·9	9·3	16·9	10·1	16·1	68·8	36·6	26·7	44·0
1920	27·5	52·8	35·7	32·6	13·2	15·3	15·1	12·5	59·3	31·9	49·2	51·9
1921	24·9	41·1	44·2	35·5	11·7	14·8	16·6	10·3	63·5	44·1	39·2	54·2
1922	28·9	46·4	44·5	39·1	9·6	15·6	14·5	11·1	61·5	38·0	41·0	49·8
1923	28·4	48·3	44·7	36·3	9·7	18·8	16·2	12·5	61·9	32·9	39·1	51·2
1924	28·4	44·6	43·4	35·7	11·2	18·5	16·8	14·1	60·4	36·9	39·8	50·2
1925	27·7	49·8	44·7	39·4	10·8	18·4	15·1	13·5	61·5	31·8	40·2	47·1
1926	27·6	54·5	47·1	33·4	10·0	17·8	14·4	13·6	62·4	27·7	38·5	53·0
1927	25·6	51·1	46·2	35·0	10·1	17·8	14·6	14·1	64·3	31·1	39·2	50·9
1928	25·6	50·3	47·2	32·3	9·6	18·0	15·4	14·9	64·8	31·7	37·4	52·8
1929	23·0	47·9	48·5	29·6	8·0	19·8	14·3	13·8	69·0	32·3	37·2	56·6
1930	23·1	46·5	38·3	27·0	7·7	20·4	19·1	13·8	69·2	33·1	42·6	59·2
1931	23·9	45·8	38·2	29·1	7·6	18·7	17·8	13·3	68·5	35·5	44·0	57·6
1932	25·2	44·3	38·3	34·6	8·4	17·0	16·0	12·8	66·4	38·7	45·7	52·6

The table on p. 512 shows how Canada's imports and exports, analysed into the three categories of raw materials, partly manufactured goods, and fully or chiefly manufactured goods, are distributed among the continents and leading countries of the world as well as the United Kingdom, other British Empire countries, the United States and other foreign countries. This latter analysis clearly demonstrates that the imports into Canada from the British Empire except the United Kingdom, consist chiefly of raw and semi-manufactured products, while the exports are made up mainly of fully manufactured products.

In trade with industrialized continents such as Europe and Asia, Canadian imports are largely manufactured goods and exports raw materials or partly manufactured goods, while in trade with South America, Oceania, Africa and North America (if the United States be excluded) the situation is the reverse.

See also Table **15** of this chapter on this subject.

CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1932.

NOTE.—Values in millions of dollars. Totals for continents include trade with countries other than those specified.

Continent and Country.	Imports.						Exports (Domestic).					
	Raw Materials.		Partly Manufactured.		Fully Manufactured.		Raw Materials.		Partly Manufactured.		Fully Manufactured.	
	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.
	$	p.c.	$	p.c.	$	p.c.	$	p.c.	$	p.c.	$	p.c.
EUROPE.												
Belgium	0·2	4·5	0·2	4·7	4·6	90·8	11·6	82·8	1·3	9·1	1·1	8·1
Czechoslovakia	0·1	2·7	–	1·1	2·7	96·2	–	3·3	–	2·0	0·2	94·7
Denmark	–	41·6	–	10·4	–	48·0	2·1	55·0	–	0·9	1·7	44·1
France	0·4	2·8	0·4	3·1	12·8	94·1	14·2	79·2	1·5	8·5	2·2	12·3
Germany	0·6	5·5	0·5	4·3	10·5	90·2	7·0	67·2	1·8	16·9	1·7	15·9
Italy	0·5	13·0	0·2	5·1	3·4	81·9	2·8	66·3	0·5	10·7	1·0	23·0
Netherlands	1·0	17·1	0·1	1·6	4·7	81·3	10·1	74·8	1·3	9·5	2·1	15·7
Norway	–	0·5	–	1·1	0·5	98·4	2·3	68·4	0·1	1·6	1·0	30·0
Sweden	–	5·1	0·1	11·7	0·7	83·2	1·5	61·3	0·2	8·2	0·7	30·5
Switzerland	0·1	2·9	–	–	3·6	97·1	–	4·7	–	4·4	0·3	90·9
United Kingdom	8·4	7·8	4·2	3·9	93·8	88·3	97·2	55·8	16·7	9·6	60·2	34·6
Totals, Europe	11·9	7·5	6·0	3·8	139·4	88·7	152·1	60·5	23·6	9·4	75·5	30·1
N. AMERICA.												
British West Indies	3·0	25·7	7·0	59·7	1·7	14·6	0·4	4·4	0·3	4·1	7·6	91·5
Newfoundland	0·8	50·9	–	0·8	0·7	48·3	1·6	24·8	0·1	1·0	4·9	74·2
St. Pierre-Miquelon	–	2·8	–	–	0·1	97·2	0·2	1·8	–	0·3	8·5	97·9
United States	108·3	30·8	19·9	5·7	223·5	63·5	53·1	22·6	54·2	23·1	127·9	54·3
Totals, N. America	114·0	30·9	27·6	7·5	227·7	61·6	56·7	21·2	54·9	20·6	155·3	58·2
S. AMERICA.												
Argentina	1·9	73·3	–	–	0·7	26·7	0·1	1·3	0·2	5·2	4·1	93·5
British Guiana	–	0·2	4·3	94·7	0·2	5·1	0·1	13·3	–	4·7	0·6	82·0
Colombia	5·1	100·0	–	–	–	–	0·3	51·1	–	1·0	0·3	47·9
Peru	3·5	100·0	–	–	–	–	0·2	36·6	0·1	12·8	0·3	50·6
Totals, S. America	11·8	68·5	4·4	25·5	1·0	6·0	0·7	8·4	0·7	7·9	7·4	83·7
ASIA.												
British India	0·4	7·3	–	0·7	4·7	92·0	–	0·1	1·8	58·1	1·3	41·8
China	0·8	22·8	1·5	40·2	1·4	37·0	1·7	28·4	2·7	46·2	1·5	25·4
Japan	1·8	29·7	0·1	1·5	4·1	68·8	5·7	34·4	7·1	43·0	3·7	22·6
Totals, Asia	3·9	21·2	1·8	9·8	12·8	69·0	7·5	26·5	11·8	41·7	9·0	31·8
OCEANIA.												
Australia	0·6	9·9	1·9	32·5	3·3	57·6	0·2	3·5	1·0	18·3	4·2	78·2
Fiji	–	–	2·6	99·7	–	0·3	–	1·8	–	30·6	0·1	67·6
New Zealand	0·6	51·0	0·5	44·6	–	4·4	0·2	4·9	0·1	2·2	3·5	92·9
Totals, Oceania	1·2	12·1	5·0	52·1	3·4	35·8	0·4	3·9	1·1	10·9	8·7	85·2
AFRICA.												
British East Africa	0·2	14·6	1·2	85·4	–	–	–	0·4	–	0·5	0·4	99·1
British South Africa	1·9	43·2	2·4	55·2	0·1	1·6	2·7	32·1	0·2	1·9	5·5	66·0
Totals, Africa	2·8	43·0	3·6	55·0	0·1	2·0	3·0	27·3	0·3	2·5	7·7	70·2
Grand Totals	**145·6**	**25·2**	**48·4**	**8·4**	**384·5**	**66·4**	**220·4**	**38·3**	**92·4**	**16·0**	**263·5**	**45·7**
United Kingdom	8·4	7·8	4·2	3·9	93·8	88·3	97·2	55·8	16·7	9·6	60·2	34·6
Other Br. Empire	8·3	20·0	20·1	48·6	13·0	31·4	6·6	14·7	3·9	8·7	34·4	76·6
Totals, Br. Empire	16·7	11·3	24·3	16·4	106·8	72·3	103·8	47·4	20·6	9·4	94·6	43·2
United States	108·3	30·8	19·9	5·7	223·5	63·5	53·1	22·6	54·2	23·1	127·9	54·3
Other foreign countries	20·6	26·1	4·2	5·3	54·2	68·6	63·6	52·0	17·6	14·4	41·0	33·6
Totals, Foreign Countries	128·9	29·9	24·1	5·6	277·7	64·5	116·7	32·6	71·8	20·1	168·9	47·3

Subsection 8.—Canada's Position in International Trade in the Calendar Years 1913 and 1932.

Canada, during the calendar year 1932, even with a material decrease in her trade, has maintained a relatively high place among the trading nations of the world. In 1930 the Dominion stood in fifth position in total trade and total imports, but in sixth position in total exports. In the calendar year 1931, due to unstable trade conditions, there were some notable changes in the relative positions of certain leading trading nations in world trade. The United Kingdom, Canada and British India, the three greatest trading nations of the British Empire, all moved downwards in their relative positions with respect to values of total exports in 1931. Germany in 1931 displaced the United Kingdom from second place in the value of exports, while Belgium and Argentina moved up to fifth and sixth positions, respectively, displacing British India and Canada. In 1932 Canada, in export trade, once more moved into fifth position, displacing Belgium and Argentina, but occupying, as last year, eighth place in total imports, and seventh place in total trade; the Netherlands, Belgium and Italy occupied fifth, sixth and seventh positions in total imports, while Belgium and the Netherlands occupied fifth and sixth positions in total trade.

COMPARISON OF THE TRADE OF THE PRINCIPAL COUNTRIES OF THE WORLD, CALENDAR YEAR 1932.

NOTE.—The figures in parentheses represent relative positions in 1931.

Country.	Total Trade.		Imports.		Domestic Exports.	
	Rank.	Amount.	Rank.	Amount.	Rank.	Amount.
		Million $		Million $		Million $
United Kingdom	1 (1)	4,250·9	1 (1)	2,797·9	2 (3)	1,453·0
United States	2 (2)	3,293·3	2 (2)	1,502·4	1 (1)	1,790·9
Germany	3 (3)	2,476·5	4 (4)	1,110·6	3 (2)	1,365·9
France	4 (4)	1,940·2	3 (3)	1,168·6	4 (4)	771·6
Belgium	5 (5)	979·0	6 (6)	512·2	6 (5)	466·8
Netherlands	6 (6)	978·5	5 (5)	592·2	10 (10)	386·3
Canada	7 (7)	946·4	8 (8)	452·6	5 (7)	493·8
Italy	8 (9)	872·5	7 (7)	478·3	9 (11)	394·2
Japan	9 (8)	869·4	9 (9)	439·1	7 (8)	430·3
British India	10 (11)	808·6	10 (11)	400·2	8 (9)	408·4
Argentina	11 (10)	672·3	11 (10)	296·1	11 (6)	376·2

Canada's Share in World Trade.—Two tables on pp. 70 and 71 of the Condensed Preliminary Report on the Trade of Canada, 1932, published by the Dominion Bureau of Statistics, and not reproduced here to economize space, show in values and percentages Canada's share in the imports and in the exports of the forty principal trading countries of the world for the calendar years 1913, 1922 and 1930.

Since 1913 Canada has made remarkable progress in the expansion of her export trade to the world's markets, and in supplying her requirements from all parts of the world. The first of the above-mentioned tables showing "Canada's Share in Imports of Principal Countries", indicates that while in 1913 Canada provided only 1·95 p.c. of the total imports of these countries, in 1930 her share was 3·50 p.c.

With regard to Empire countries, imports from Canada by the British West Indies expanded from 9·7 p.c. in 1913 to 17·8 p.c. of their total imports in 1930; by British Guiana from 9·3 p.c. to 15·8 p.c.; by Australia from 1·2 p.c. to 2·3 p.c.; by New Zealand from 2·1 p.c. to 8·9 p.c.; by British South Africa from 2·0 p.c. to 3·2 p.c.; by Newfoundland from 32 p.c. to 41 p.c.; while the percentage for the United Kingdom remained stationary at 3·6 in 1930 and 3·8 in 1913. Among the principal foreign countries, imports from Canada by the United States increased from 7·9 p.c. of its total imports in 1913 to 13·1 p.c. in 1930; by Germany from 0·6 p.c. to 1·3 p.c.; by Italy from 0·4 p.c. to 3·4 p.c.; and by France from 0·2 p.c. to 0·9 p.c.

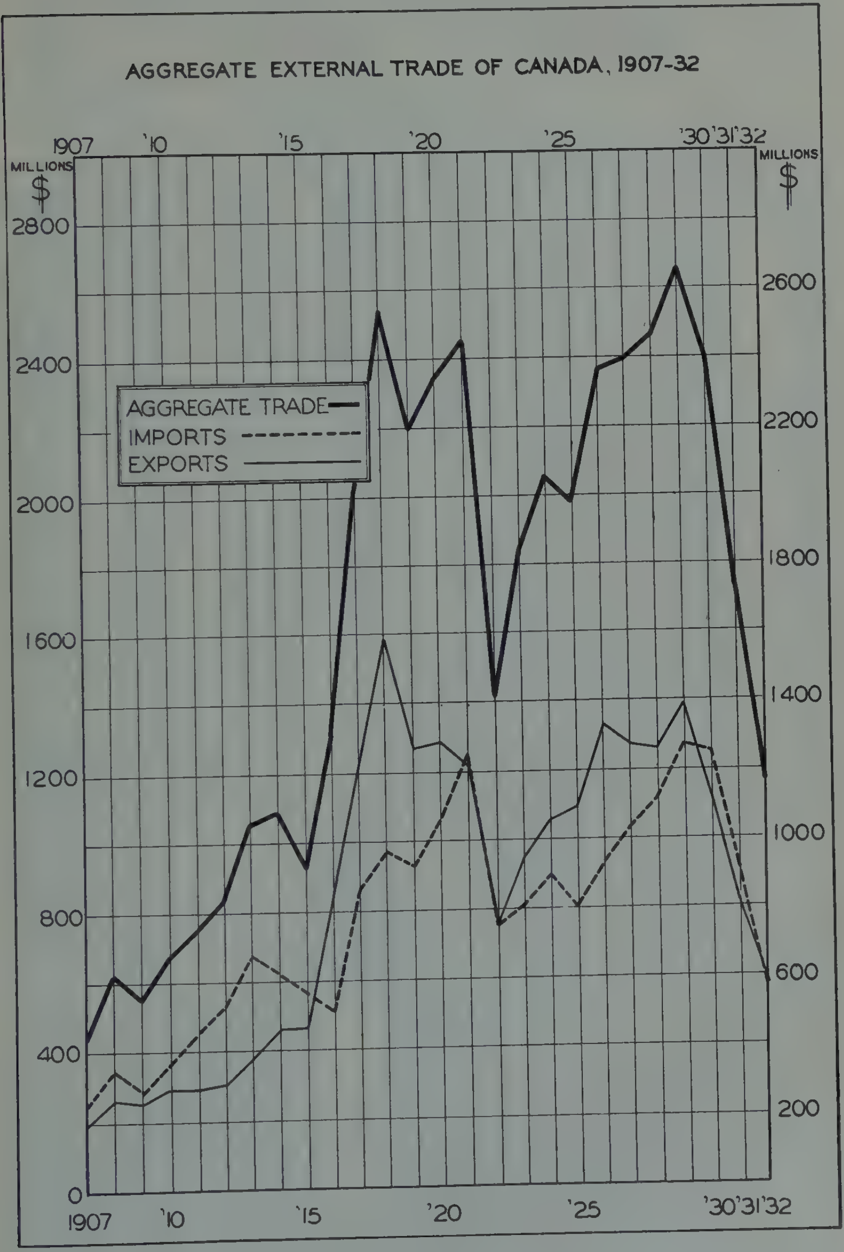
In the interpretation of these and all tables showing trade between Canada and other specified countries, it should be borne in mind that there are numerous and, in some instances, quite large discrepancies between the figures of trade with a specified country as shown by Canada and as shown by that country. These arise in all countries, chiefly through inability to trace the actual origin of imports and final destination of exports. A large proportion of Canada's overseas exports passes through the United States and is therefore credited to that country rather than Canada by the importing countries. If the Canadian figures of declared exports be substituted, the total imports from Canada of these 40 principal countries in 1930 would be $853,350,000, or 3·63 p.c. of the total imports of these countries in 1930.

The other side of this trade expansion is shown in the other table, "Canada's Share in Domestic Exports of Principal Countries", which indicates the increasing proportion of the exports of 40 countries taken by Canada. The exports of these countries to Canada increased from 3·39 p.c. of their total exports in 1913 to 4·35 p.c. in 1930.

Among countries of the Empire, Canada's purchases from the British West Indies increased from 11·8 p.c. of their total exports in 1913 to 22·3 p.c. in 1930; from New Zealand from 2·7 p.c. to 5·7 p.c.; from Fiji from 4·7 p.c. to 28·0 p.c.; from Australia from 0·2 p.c. to 1·1 p.c.; and from the United Kingdom from 4·5 p.c. to 5·1 p.c. Among the principal foreign countries, exports to Canada by the United States increased from 15·9 p.c. of its total exports in 1913 to 16·6 p.c. in 1930; by France from 0·4 p.c. to 1·1 p.c.; by Belgium from 0·5 p.c. to 1·0 p.c.; by the Netherlands from 0·1 p.c. to 0·9 p.c.; and by Japan from 0·8 p.c. to 1·3 p.c.

Subsection 9.—Main Historical Tables and Tables showing Current Trends in External Trade.

In this subsection are assembled in summary form the main tables of Canadian trade since Confederation, while the figures of trade in the latest years are given in greater detail by countries and commodities. Tables **1** to **9** inclusive are of an historical character, while Tables **10** and **11** give in summary form, and Tables **12** and **13** in detail, our exports and imports for the four latest fiscal years. In Table **14** imports are divided into dutiable and free, and exports into Canadian and foreign produce. Table **15** analyses our trade in the latest year by main groups of origin and degrees of manufacture. Table **16** classifies that trade according to purpose. Table **17** gives trade by provinces and customs ports, and Table **18** by tariffs. Tables **19** and **20** deal with our imports and exports by countries in the latest five years, while Table **21** shows the values of our imports and exports transported *via* the United States.


AGGREGATE EXTERNAL TRADE OF CANADA, 1907-32
1907
'10
'15
'20
'25
'30 '31 '32
MILLIONS $
2800
2400
2000
1600
1200
800
400
0
2600
2200
1800
1400
1000
600
200
AGGREGATE TRADE
IMPORTS
EXPORTS

1.—Aggregate External Trade of Canada, fiscal years 1868-1933.

Fiscal Year.	Imports of Merchandise Entered for Home Consumption.			Exports of Merchandise.[1]			Total of Imports for Home Consumption and Exports (Merchandise).
	Dutiable.	Free.	Total.	Canadian Produce.[1]	Foreign Produce.	Total.	
	$	$	$	$	$	$	$
1868.....	43,655,696	23,434,463	67,090,159	48,504,899	4,196,821	52,701,720	119,791,879
1869.....	41,069,342	22,085,599	63,154,941	52,400,772	3,855,801	56,256,573	119,411,514
1870.....	45,127,422	21,774,652	66,902,074	59,043,590	6,527,622	65,571,212	132,473,286
1871.....	60,094,362	24,120,026	84,214,388	57,630,024	9,853,244	67,483,268	151,697,656
1872.....	68,276,157	36,679,210	104,955,367	65,831,083	12,798,182	78,629,265	183,584,632
1873.....	71,198,176	53,310,953	124,509,129	76,538,025	9,405,910	85,943,935	210,453,064
1874.....	76,232,530	46,948,357	123,180,887	76,741,997	10,614,096	87,356,093	210,536,980
1875.....	78,138,511	39,270,057	117,408,568	69,709,823	7,137,319	76,847,142	194,255,710
1876.....	60,238,297	32,274,810	92,513,107	72,491,437	7,234,961	79,726,398	172,239,505
1877.....	60,916,770	33,209,624	94,126,394	68,030,546	7,111,108	75,141,654	169,268,048
1878.....	59,773,039	30,622,812	90,395,851	67,989,800	11,164,878	79,154,678	169,550,529
1879.....	55,426,836	23,275,683	78,702,519	62,431,025	8,355,644	70,786,669	149,489,188
1880.....	54,182,967	15,717,575	69,900,542	72,899,697	13,240,006	86,139,703	156,040,245
1881.....	71,620,725	18,867,604	90,488,329	83,944,701	13,375,117	97,319,818	187,808,147
1882.....	85,757,433	25,387,751	111,145,184	94,137,657	7,628,453	101,766,110	212,911,294
1883.....	91,588,339	30,273,157	121,861,496	87,702,431	9,751,773	97,454,204	219,315,700
1884.....	80,010,498	25,962,480	105,972,978	79,833,098	9,389,106	89,222,204	195,195,182
1885.....	73,269,618	26,486,157	99,755,775	79,131,735	8,079,646	87,211,381	186,967,156
1886.....	70,658,819	25,333,318	95,992,137	77,756,704	7,438,079	85,194,783	181,186,920
1887.....	78,120,679	26,986,531	105,107,210	80,960,909	8,549,333	89,510,242	194,617,452
1888.....	69,645,824	31,025,804	100,671,628	81,382,072	8,803,394	90,185,466	190,857,094
1889.....	74,475,139	34,623,057	109,098,196	80,272,456	6,938,455	87,210,911	196,309,107
1890.....	77,106,286	34,576,287	111,682,573	85,257,586	9,051,781	94,309,367	205,991,940
1891.....	74,536,036	36,997,918	111,533,954	88,671,738	8,798,631	97,470,369	209,004,323
1892.....	69,160,737	45,999,676	115,160,413	99,032,466	13,121,791	112,154,257	227,314,670
1893.....	69,873,571	45,297,259	115,170,830	105,488,798	8,941,856	114,430,654	229,601,484
1894.....	62,779,182	46,291,729	109,070,911	103,851,764	11,833,805	115,685,569	224,756,480
1895.....	58,557,655	42,118,236	100,675,891	102,828,441	6,485,043	109,313,484	209,989,375
1896.....	67,239,759	38,121,402	105,361,161	109,707,805	6,606,738	116,314,543	221,675,704
1897.....	66,220,765	40,397,062	106,617,827	123,632,540	10,825,163	134,457,703	241,075,530
1898.....	74,625,088	51,682,074	126,307,162	144,548,662	14,980,883	159,529,545	285,836,707
1899.....	89,433,172	59,989,244	149,422,416	137,360,792	17,520,088	154,880,880	304,303,296
1900.....	104,346,795	68,304,881	172,651,676	168,972,301	14,265,254	183,237,555	355,889,231
1901.....	105,969,756	71,961,163	177,930,919	177,431,386	17,077,757	194,509,143	372,440,062
1902.....	118,657,496	78,080,308	196,737,804	196,019,763	13,951,101	209,970,864	406,708,668
1903.....	136,796,065	88,298,744	225,094,809	214,401,674	10,828,087	225,229,761	450,324,570
1904.....	148,909,576	94,999,839	243,909,415	198,414,439	12,641,239	211,055,678	454,965,093
1905.....	150,928,787	101,035,427	251,964,214	190,854,946	10,617,115	201,472,061	453,436,275
1906.....	173,046,109	110,694,171	283,740,280	235,483,956	11,173,846	246,657,802	530,398,082
1907[2]....	152,065,529	98,160,306	250,225,835	180,545,306	11,541,927	192,087,233	442,313,068
1908.....	218,160,047	134,380,832	352,540,879	246,960,968	16,407,984	263,368,952	615,909,831
1909.....	175,014,160	113,580,036	288,594,196	242,603,584	17,318,782	259,922,366	548,516,562
1910.....	227,264,346	143,053,853	370,318,199	279,247,551	19,516,442	298,763,993	669,082,192
1911.....	282,723,812	170,000,791	452,724,603	274,316,553	15,683,657	290,000,210	742,724,813
1912.....	335,304,060	187,100,615	522,404,675	290,223,857	17,492,294	307,716,151	830,120,826
1913.....	441,606,885	229,600,349	671,207,234	355,754,600	21,313,755	377,068,355	1,048,275,589
1914.....	410,258,744	208,935,254	619,193,998	431,588,439	23,848,785	455,437,224	1,074,631,222
1915.....	279,792,195	176,163,713	455,955,908	409,418,836	52,023,673	461,442,509	917,398,417
1916.....	289,366,527	218,834,607	508,201,134	741,610,638	37,689,432	779,300,070	1,287,501,204
1917.....	461,733,609	384,717,269	846,450,878	1,151,375,768	27,835,332	1,179,211,100	2,025,661,978
1918.....	542,341,522	421,191,056	963,532,578	1,540,027,788	46,142,004	1,586,169,792	2,549,702,370
1919.....	526,494,658	393,217,047	919,711,705	1,216,443,806	52,321,479	1,268,765,285	2,188,476,990
1920.....	693,655,165	370,872,958	1,064,528,123	1,239,492,098	47,166,611	1,286,658,709	2,351,186,832
1921.....	847,561,406	392,597,476	1,240,158,882	1,189,163,701	21,264,418	1,210,428,119	2,450,587,001
1922.....	495,626,323	252,178,009	747,804,332	740,240,680	13,686,329	753,927,009	1,501,731,341
1923.....	537,258,782	265,320,462	802,579,244	931,451,443	13,844,394	945,295,837	1,747,875,081
1924.....	591,299,094	302,067,773	893,366,867	1,045,351,056	13,412,241	1,058,763,297	1,952,130,164
1925.....	516,014,455	280,918,082	796,932,537	1,069,067,353	12,294,290	1,081,361,643	1,878,294,180
1926.....	583,051,670	344,277,062	927,328,732	1,315,355,791	13,344,346	1,328,700,137	2,256,028,869
1927.....	659,897,013	370,995,492	1,030,892,505	1,252,157,506	15,415,636	1,267,573,142	2,298,465,647
1928.....	710,050,228	398,906,238	1,108,956,466	1,228,349,343	22,248,691	1,250,598,034	2,359,554,500
1929.....	821,075,430	444,603,661	1,265,679,091	1,363,709,672	25,186,403	1,388,896,075	2,654,575,166
1930.....	819,230,474	429,043,108	1,248,273,582	1,120,258,302	24,679,768	1,144,938,070	2,393,211,652
1931.....	574,090,230	332,522,465	906,612,695	799,742,667	17,285,381	817,028,048	1,723,640,743
1932.....	388,498,048	190,005,856	578,503,904	576,344,302	11,221,215	587,565,517	1,166,069,421
1933[3]....	256,349,685	149,921,644	406,271,329	473,799,955	6,913,842	480,713,797	886,985,126

[1] Including exports to the United States estimated "short" in the years 1868-1900. [2] Nine months. [3] Preliminary figures.

2.—Ratio of Exports to Imports and Values per Capita of Exports, Imports and Total Trade, fiscal years 1868-1933.

Fiscal Year.	Excess of Imports Entered for Consumption over Total Exports.	Excess of Total Exports over Imports Entered for Consumption.	Percentage Rate of Total Exports to Imports Entered for Consumption.	Values per capita of—		
				Exports Canadian Produce.	Total Imports.	Total Trade.[2]
	$	$	p.c.	$	$	$
1868	14,388,439	–	78·55	14·38	19·90	34·28
1869	6,898,368	–	89·07	15·35	18·50	33·85
1870	1,330,862	–	98·01	17·09	19·37	36·46
1871	16,731,120	–	80·13	16·38	23·94	40·32
1872	26,326,102	–	74·92	18·23	29·06	47·29
1873	38,565,194	–	69·03	20·87	33·94	54·81
1874	35,824,794	–	70·92	20·06	32·20	52·26
1875	40,561,426	–	64·45	17·93	30·21	48·14
1876	12,786,709	–	86·18	18·36	23·43	41·79
1877	18,984,740	–	79·83	16·97	23·45	40·42
1878	11,241,173	–	87·56	16·67	22·16	38·83
1879	7,915,850	–	89·94	15·06	18·98	34·04
1880	–	16,239,161	123·23	17·29	16·58	33·87
1881	–	6,831,489	107·05	19·36	20·86	40·22
1882	9,379,074	–	91·57	21·47	25·35	46·82
1883	24,407,292	–	79·97	19·78	27·49	47·27
1884	16,750,774	–	84·19	17·80	23·63	41·43
1885	12,544,394	–	87·42	17·43	21·98	39·41
1886	10,797,354	–	88·75	16·94	20·92	37·86
1887	15,596,968	–	85·16	17·46	22·66	40·12
1888	10,486,162	–	89·58	17·36	21·47	38·83
1889	21,187,285	–	79·93	16·94	23·02	39·96
1890	17,373,206	–	84·44	17·79	23·30	41·09
1891	14,063,585	–	87·39	18·31	23·02	41·33
1892	3,006,156	–	97·39	20·26	23·55	43·81
1893	740,176	–	99·36	21·37	23·33	44·70
1894	–	6,614,658	106·06	20·84	21·88	42·72
1895	–	8,637,593	108·58	20·43	20·00	40·43
1896	–	10,453,382	110·40	21·57	20·72	42·29
1897	–	27,839,876	126·11	24·04	20·73	44·77
1898	–	33,222,383	126·30	27·80	24·29	52·09
1899	–	5,458,464	103·65	26·12	28·41	54·53
1900	–	10,585,879	106·13	31·75	32·44	64·19
1901	–	16,578,224	109·32	32·84	33·13	65·97
1902	–	13,233,060	106·73	35·43	35·56	70·99
1903	–	134,952	100·06	37·79	39·68	77·47
1904	32,853,737	–	86·53	34·06	41·87	75·93
1905	50,492,153	–	79·96	31·85	42·05	73·90
1906	37,082,478	–	86·93	38·16	45·98	84·14
1907[1]	58,138,602	–	76·77	28·65	39·70	68·35
1908	89,171,927	–	74·71	38·05	54·31	92·36
1909	28,671,830	–	90·06	36·24	43·10	79·34
1910	71,554,200	–	80·68	40·37	53·54	93·91
1911	162,724,393	–	64·06	38·06	62·82	100·88
1912	214,688,524	–	58·90	39·40	70·93	110·33
1913	294,138,879	–	56·18	47·26	89·17	136·43
1914	163,756,774	–	73·56	56·10	80·49	136·59
1915	–	5,486,601	101·20	52·08	57·99	110·07
1916	–	271,098,936	153·34	92·29	63·24	155·53
1917	–	332,760,222	139·31	140·75	103·48	244·23
1918	–	622,637,214	164·62	184·91	115·69	300·60
1919	–	349,053,580	137·95	143·48	108·48	251·96
1920	–	222,130,586	120·87	143·61	123·34	266·95
1921	29,730,763	–	97·60	135·32	141·20	276·52
1922	–	6,122,677	100·82	83·00	83·84	166·84
1923	–	142,716,593	117·78	103·39	89·09	192·48
1924	–	165,396,430	118·51	114,35	97·72	212·07
1925	–	284,429,106	135·69	115·04	85·76	200·80
1926	–	401,371,405	143·28	139·19	98·13	237·32
1927	–	236,680,637	122·92	129·96	106·99	236·95
1928	–	141,641,568	112·76	124·92	112·78	237·70
1929	–	123,216,984	109·72	136·00	126·23	262·23
1930	103,335,512	–	91·72	117·83	122·31	240·14
1931	89,584,647	–	90·12	77·09	87·39	164·48
1932	–	9,061,613	100·16	54·86	55·06	109·92
1933[3]	–	74,442,468	118·32	44·55	38·20	82·75

[1] Nine months. [2] Not including exports of foreign produce. [3] Preliminary figures.

3.—Movement of Coin and Bullion, fiscal years 1868-1933.

NOTE.—Up to 1919 "silver bullion in bars, blocks, ingots, drops, sheets and plates, unmanufactured" was included in "coin and bullion" but since that time it has been regarded as "merchandise". The figures from 1899 have been revised in accordance with the new arrangement.

Fiscal Year.	Total Imports.	Exports.			Total Imports and Exports of Coin and Bullion.
		Canadian.	Foreign.	Total.	
	$	$	$	$	$
1868	4,895,147	4,866,168	–	4,866,168	9,761,315
1869	4,247,229	4,218,208	–	4,218,208	8,465,437
1870	4,335,529	8,002,278	–	8,002,278	12,337,807
1871	2,733,094	6,690,350	–	6,690,350	9,423,444
1872	2,753,740	4,010,398	–	4,010,398	6,764,147
1873	3,005,465	3,845,987	–	3,845,987	6,851,452
1874	4,223,282	1,995,835	–	1,995,835	6,219,117
1875	2,210,089	1,039,837	–	1,039,837	3,249,926
1876	2,220,111	1,240,037	–	1,240,037	3,460,148
1877	2,174,089	–	733,739	733,739	2,907,828
1878	803,726	–	168,989	168,989	972,715
1879	1,639,089	–	704,586	704,586	2,343,675
1880	1,881,807	–	1,771,755	1,771,755	3,653,562
1881	1,123,275	–	971,005	971,005	2,094,280
1882	1,503,743	–	371,093	371,093	1,874,836
1883	1,275,523	–	631,600	631,600	1,907,123
1884	2,207,666	–	2,184,292	2,184,292	4,391,958
1885	2,954,244	–	2,026,980	2,026,980	4,981,224
1886	3,610,557	–	56,531	56,531	3,667,088
1887	532,218	–	5,569	5,569	537,787
1888	2,175,472	–	17,534	17,534	2,193,006
1889	575,251	–	1,978,256	1,978,256	2,553,507
1890	1,083,011	–	2,439,782	2,439,782	3,522,793
1891	1,811,170	129,328	817,599	946,927	2,758,097
1892	1,818,530	306,447	1,502,671	1,809,118	3,627,648
1893	6,534,200	309,459	3,824,239	4,133,698	10,667,898
1894	4,023,072	310,006	1,529,374	1,839,380	5,862,452
1895	4,576,620	256,571	4,068.748	4,235,319	8,901,939
1896	5,226,319	207,532	4,491,777	4,699,309	9,925,628
1897	4,676,194	327,298	3,165,252	3,492,550	8,168,744
1898	4,390,844	1,045,723	3,577,415	4,623,138	9,013,982
1899	4,629,177	1,101,245	2,914,780	4,016,025	8,645,202
1900	8,152,640	1,670,068	6,987,100	8,657,168	16,809,808
1901	3,307,069	–	1,978,489	1,978,489	5,285,558
1902	6,053,791	–	1,669,422	1,669,422	7,723,213
1903	8,695,707	–	619,963	619,963	9,315,670
1904	7,554,917	–	2,465,557	2,465,557	10,020,474
1905	9,961,340	–	1,844,811	1,844,811	11,806,151
1906	6,670,527	–	9,928,828	9,928,828	16,549,355
1907 (9 months)	7,029,047	–	13,189,964	13,189,964	20,219,011
1908	5,887,737	–	16,637,654	16,637,654	22,525,391
1909	9,611,761	2	1,589,791	1,589,793	11,201,554
1910	5,514,817	–	2,594,536	2,594,536	8,109,353
1911	9,226,715	–	7,196,155	7,196,155	16,422,870
1912	25,077,515	–	7,601,099	7,601,099	32,678,614
1913	4,309,811	–	16,163,702	16,163,702	20,473,513
1914	14,498,451	1,219	23,559,485	23,560,704	38,059,155
1915	131,483,396	667	29,365,701	29,366,368	160,849,764
1916	33,876,227	315	103,572,117	103,572,432	137,448,659
1917	26,986,548	86,087	196,460,961	196,547,048	223,533,596
1918	11,290,341	290,281	3,201,122	3,491,403	14,781,744
1919[1]	–	–	–	–	–
1920	50,463,494	230,117	49,815,279	50,045,396	100,508,890
1921	7,218,775	24,368,846	9,815,827	34,184,673	41,403,448
1922	4,788,246	18,085,904	5,251,430	23,337,331	28,125,577
1923	26,455,231	1,766,060	25,782,806	27,548,866	54,004,097
1924	3,496,705	12,521,619	12,924,211	25,445,830	28,942,535
1925	4,142,292	2,948,353	1,971,620	4,919,973	9,062,265
1926	51,437,859	45,880,408	25,242,303	71,122,711	122,560,570
1927	46,086,458	2,011,391	43,040,819	45,052,210	91,138,668
1928	31,308,807	30,855,656	31,031,311	61,886,967	93,195,774
1929	29,560,310	36,932,465	58,299,998	95,232,463	124,792,773
1930	2,716,218	410,435	4,494,783	4,905,218	7,621,436
1931	39,126,924	80	44,996,512	44,996,592	84,123,516
1932	1,815,016	44,994,578	22,860,214	67,854,792	69,669,808
1933[2]	1,010,985	50,722,602	6,842,342	57,564,944	58,575,929

[1] No record for 1919 imports and exports.

[2] Preliminary figures.

4.—Duties Collected on Exports, 1868-92, and on Imports for Home Consumption, 1868-1932, with Percentages of Expense of Collection to Gross Customs Revenue Collected, fiscal years 1868-1932.

NOTE.—Duties on exports were not collected after the year 1892. The figures in this table are the gross figures of duties collected; the net national revenue from customs taxation, because of the drawbacks paid where commodities on which duties have been collected are afterwards exported in a more highly manufactured state, is considerably smaller. For statistics of net customs revenue see Statement of Customs Duties, Table 4, in Chapter XXI on Public Finance.

Fiscal Year.	Duties Collected on Exports.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Exports.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.
	$	$	p.c.		$	$	p.c.
1868..........	17,986	8,801,446	5·99	1881..........	8,141	18,492,645	3·87
1869..........	14,403	8,284,507	7·09	1882..........	8,810	21,700,028	3·33
1870..........	37,912	9,425,028	5·41	1883..........	9,756	23,162,553	3·26
1871..........	36,066	11,807,590	4·21	1884..........	8,515	20,156,448	3·96
1872..........	24,809	13,020,684	4·04	1885..........	12,305	19,121,254	4·14
1873..........	20,152	12,997,578	4·35	1886..........	20,726	19,427,398	4·10
1874..........	14,565	14,407,318	4·55	1887..........	31,397	22,438,309	3·64
1875..........	7,243	15,354,139	4·44	1888..........	21,772	22,187,869	3·81
1876..........	4,500	12,828,614	5·61	1889..........	42,207	23,742,317	3·62
1877..........	4,103	12,544,348	5·75	1890..........	93,674	23,921,234	3·63
1878..........	4,161	12,791,532	5·58	1891..........	64,803	23,416,266	3·83
1879..........	4,272	12,935,269	5·56	1892..........	108	20,550,474	4·39
1880..........	8,896	14,129,953	5·04				

Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.
	$	p.c.		$	p.c.		$	p.c.
1893.....	21,161,711	4·26	1906...	46,671,101	3·31	1919...	158,046,334[1]	3·13
1894.....	19,379,822	4·75	1907[2]...	40,290,172	3·04	1920...	187,524,182[1]	2·49
1895.....	17,887,269	5·13	1908...	58,331,074	3·30	1921...	179,667,683[1]	3·36
1896.....	20,219,037	4·43	1909...	48,059,792	4·15	1922...	121,487,394[1]	3·22
1897.....	19,891,997	4·73	1910...	61,024,239	3·31	1923...	133,803,370[1]	2·58
1898.....	22,157,788	4·37	1911...	73,312,368	2·98	1924...	135,122,345	2·49
1899.....	25,734,229	4·02	1912...	87,576,037	2·78	1925...	120,222,454	3·09
1900.....	28,889,110	3·71	1913...	115,063,688	2·74	1926...	143,933,111	2·83
1901.....	29,106,980	3·86	1914...	107,180,578	3·59	1927...	158,966,367	2·66
1902.....	32,425,532	3·62	1915...	79,205,910[1]	4·77	1928...	171,872,768	3·09
1903.....	37,110,355	3·31	1916...	103,940,101[1]	3·55	1929...	200,479,505	3·02
1904.....	40,954,349	3·31	1917...	147,631,455[1]	2·54	1930...	199,011,628	3·30
1905.....	42,024,340	3·49	1918...	161,595,629[1]	2·51	1931...	149,250,992	4·45
						1932...	113,997,851	4·87

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[1] Includes War tax. [2] Nine months.

5.—Exports to the United Kingdom, to the United States and to Other Countries, of Merchandise the Produce of Canada, fiscal years 1868-1933.

Fiscal Year.	Exports to United Kingdom.	Per cent Can. Exports to U.K. to Total Can. Exports. (mdse.)	Exports to United States.	Per cent. Can. Exports to U.S. to Total Can. Exports. (mdse.)	Exports to Other Countries.	Total Exports of Canadian Produce.
	$	p.c.	$	p.c.	$	$
1868	17,905,808	36·9	25,349,568	52·3	5,249,433	48,504,809
1869	20,486,389	39·1	26,717,656	51·0	5,196,727	52,400,772
1870	22,512,991	38·1	30,361,328	51·4	6,169,271	59,043,590
1871	21,733,556	37·7	29,164,358	50·6	6,732,110	57,630,024
1872	25,223,785	38·3	32,871,496	49·9	7,735,802	65,831,083
1873	31,402,234	41·0	36,714,144	48·0	8,421,647	76,538,025
1874	35,769,190	46·6	33,195,805	43·3	7,777,002	76,741,997
1875	34,199,134	49·1	27,902,748	40·0	7,607,941	69,709,823
1876	34,379,005	47·4	30,080,738	41·5	8,031,694	72,491,437
1877	35,491,671	52·2	24,326,332	35·8	8,212,543	68,030,546
1878	35,861,110	52·7	24,381,009	35·9	7,747,681	67,989,800
1879	29,393,424	47·1	25,491,356	40·8	7,546,245	62,431,025
1880	35,208,031	48·3	29,566,211	40·6	8,125,455	72,899,697
1881	42,637,219	50·8	34,038,431	40·5	7,269,051	83,944,701
1882	39,816,813	42·3	45,782,584	48·6	8,538,260	94,137,657
1883	39,538,067	45·1	39,513,225	45·1	8,651,139	87,702,431
1884	37,410,870	46·9	34,332,641	43·0	8,089,587	79,833,098
1885	36,479,051	46·1	35,566,810	44·9	7,085,874	79,131,735
1886	36,694,263	47·2	34,284,490	44·1	6,777,951	77,756,704
1887	38,714,331	47·8	35,269,922	43·6	6,976,656	80,960,909
1888	33,648,284	41·3	40,407,483	49·6	7,326,305	81,382,072
1889	33,504,281	41·7	39,519,940	49·2	7,248,235	80,272,456
1890	41,499,149	48·7	36,213,279	42·5	7,545,158	85,257,586
1891	43,243,784	48·8	37,743,430	42·6	7,684,524	88,671,738
1892	54,949,055	55·5	34,666,070	35·0	9,417,341	99,032,466
1893	58,409,606	55·4	37,296,110	35·4	9,783,082	105,488,798
1894	60,878,056	58·6	32,562,509	31·4	10,411,199	103,851,764
1895	57,903,564	56·3	35,603,863	34·6	9,321,014	102,828,441
1896	62,717,941	57·2	37,789,481	34·4	9,200,383	109,707,805
1897	69,533,852	56·2	43,664,187	35·3	10,434,501	123,632,540
1898	93,065,019	64·4	38,989,525	27·0	12,494,118	144,548,662
1899	85,113,681	62·0	39,326,485	29·0	12,920,626	137,360,792
1900	96,562,875	57·1	57,996,488	34·2	14,412,938	168,972,301
1901	92,857,525	52·3	67,983,673	38·3	16,590,188	177,431,386
1902	109,347,345	55·8	66,567,784	34·0	20,104,634	196,019,763
1903	125,199,980	58·4	67,766,367	31·6	21,435,327	214,401,674
1904	110,120,892	55·5	66,856,885	33·7	21,436,662	198,414,439
1905	97,114,867	50·9	70,426,765	36·9	23,313,314	190,854,946
1906	127,456,465	54·1	83,546,306	35·5	24,481,185	235,483,956
1907[1]	98,691,186	54·7	62,180,439	34·4	19,673,681	180,545,306
1908	126,194,124	51·1	90,814,871	36·8	29,951,973	246,960,968
1909	126,384,724	52·1	85,334,806	35·2	30,884,054	242,603,584
1910	139,482,945	50·0	104,199,675	37·3	35,564,931	279,247,551
1911	132,156,924	48·2	104,115,823	38·0	38,043,806	274,316,553
1912	147,240,413	50·7	102,041,222	35·2	40,942,222	290,223,857
1913	170,161,903	47·8	139,725,953	39·3	45,866,744	355,754,600
1914	215,253,969	49·9	163,372,825	37·9	52,961,645	431,588,439
1915	186,668,554	45·6	173,320,216	42·3	49,430,066	409,418,836
1916	451,852,399	60·9	201,106,488	27·1	88,651,751	741,610,638
1917	742,147,537	64·5	280,616,330	24·4	128,611,901	1,151,375,768
1918	845,480,069	54·9	417,233,287	27·0	277,314,432	1,540,027,788
1919	540,750,977	44·5	454,873,170	37·4	220,819,659	1,216,443,806
1920	489,152,637	39·5	464,028,183	37·4	286,311,278	1,239,492,098
1921	312,844,871	26·3	542,322,967	45·6	333,995,863	1,189,163,701
1922	299,361,675	40·4	292,588,643	39·5	148,290,362	740,240,680
1923	379,067,445	40·7	369,080,218	39·6	183,303,780	931,451,443
1924	360,057,782	34·4	430,707,544	41·2	254,585,730	1,045,351,056
1925	395,843,433	37·0	417,417,144	39·0	255,806,766	1,069,067,353
1926	508,237,560	38·6	474,987,367	36·1	332,130,864	1,315,355,791
1927	446,872,851	35·7	466,422,789	37·3	338,861,866	1,252,157,506
1928	410,691,392	33·4	478,145,383	38·9	339,512,568	1,228,349,343
1929	429,730,485	31·5	499,612,145	36·7	434,367,042	1,363,709,672
1930	281,745,965	25·2	515,049,763	46·0	323,462,574	1,120,258,302
1931	219,246,499	27·4	349,660,563	43·7	230,835,605	799,742,667
1932	174,043,725	30·2	235,186,674	40·8	167,113,903	576,344,302
1933[2]	184,361,019	38·9	143,160,400	30·2	146,278,536	473,799,955

[1] Nine months. [2] Preliminary figures.

6.—Imports from the United Kingdom, from the United States and from Other Countries, of Merchandise Entered for Home Consumption, fiscal years 1868–1933.

Fiscal Year.	Imports from United Kingdom.	Per cent Imports from U.K. to Total Imports. (mdse.)	Imports from United States.	Per cent Imports from U.S. to Total Imports. (mdse.)	Imports from Other Countries.	Total Imports for Home Consumption.
	$	p.c.	$	p.c.	$	$
1868	37,617,325	56·1	22,660,132	33·8	6,812,702	67,090,159
1869	35,496,764	56·2	21,497,380	34·0	6,160,797	63,154,941
1870	37,537,095	56·1	21,697,237	32·4	7,667,742	66,902,074
1871	48,498,202	57·6	27,185,586	32·3	8,530,600	84,214,388
1872	62,209,254	59·7	33,741,995	32·1	9,004,118	104,955,367
1873	67,996,945	54·6	45,189,110	36·3	11,323,074	124,509,129
1874	61,424,407	49·9	51,706,906	42·0	10.049,574	123,180,887
1875	60,009,084	51·1	48,930,358	41·7	8,469,126	117,408.568
1876	40,479,253	43·8	44,099.880	47·7	7,933,974	92,513,107
1877	39,331,621	41·8	49,376,008	52·5	5,418,765	94,126,394
1878	37,252,769	41·2	48,002,875	53·1	5,140,207	90,395,851
1879	30,967,778	39·3	42,170,306	53·6	5.564,435	78,702,519
1880	33,764,439	48·3	28,193,783	40·3	7,942,320	69,900,542
1881	42,885,142	47·4	36,338,701	40·6	11,264,486	90,488,329
1882	50,356,268	45·3	47,052,935	42·3	13,735,981	111,145,184
1883	51,679.762	42·4	55,147,243	45·3	15,034,491	121,861,496
1884	41,925,121	39·6	49,785,888	47·0	14,261,969	105,972,978
1885	40,031,448	40·1	45,576,510	45·7	14,147,817	99,755,775
1886	39,033,006	40·7	42,818,651	44·6	14,140,480	95,992,137
1887	44,741,350	42·6	44,795,908	42·6	15,569,952	105,107,210
1888	39,167,644	38·9	46,440,296	46·1	15,063,688	100,671,628
1889	42,251,189	38·7	50,029,419	45·9	16,817,588	109,098,196
1890	43,277,009	38·8	51,365,661	46·0	17,039,903	111,682,573
1891	42,018,943	37·7	52,033,477	46·7	17,481,534	111,533,954
1892	41,063,711	35·7	51,742,132	44·9	22,354,570	115,160,413
1893	42,529,340	36·9	52,339,796	45·4	20,301,694	115,170,830
1894	37,035,963	34·0	50,746,091	46·5	21,288,857	109,070,911
1895	31,059,332	30·9	50,179,004	49·8	19,437,555	100,675,891
1896	32,824,505	31·2	53,529,390	50·8	19,007,266	105,361,161
1897	29,401,188	27·6	57,023,342	53·5	20,193,297	106,617,827
1898	32,043,461	25·4	74,824,923	59·2	19,438,778	126,307,162
1899	36,966,552	24·7	88,506,881	59·2	23,948,983	149,422,416
1900	44,280,041	25·7	102,224,917	59·2	26,146,718	172,651,676
1901	42,820,334	24·1	107,377,906	60·3	27,732,679	177,930,919
1902	49,022,726	25·0	115,001,533	58·4	32,713,545	196,737,804
1903	58,793,038	26·2	129,071,197	57·3	37,230,574	225,094,809
1904	61,724,893	25·3	143,329,697	58·7	38,854,825	243,909,415
1905	60,342,704	24·0	152,778,576	60·6	38,842,934	251,964,214
1906	69,183,915	24·4	169,256,452	59·6	45,299,913	283,740,280
1907[1]	64,415,756	25·8	149,085,577	59·5	36,724,502	250,225,835
1908	94,417,320	26·8	205.309,803	58·2	52,813,756	352,540,879
1909	70,682,600	24·5	170,432,360	59·0	47,479,236	288,594,196
1910	95,337,058	25·8	218,004,556	58·9	56,976,585	370,318,199
1911	109,934,753	24·3	275,824,265	60·8	66,965,585	452,724,603
1912	116,906,360	22·4	331,384,657	63·4	74,113,658	522,404,675
1913	138,742,644	20·7	436,887,315	65·0	95,577,275	671,207,234
1914	132,070,406	21·4	396,302,138	64·0	90,821,454	619,193,998
1915	90,157,204	19·8	297,142,059	65·2	68,656,645	455,955,908
1916	77,404,361	15·2	370,880,549	73·0	59,916,224	508,201,134
1917	107,096,735	12·7	665,312,759	78·6	74,041,384	846,450,878
1918	81,324,283	8·4	792,894,957	82·3	89,313,338	963,532,578
1919	73,035,118	8·0	750,203,024	81·6	96,473,563	919,711,705
1920	126,362,631	11·9	801,097,318	75·3	137,068,174	1,064,528,123
1921	213,973,562	17·3	856,176,820	69·0	170,008,500	1,240,158,882
1922	117,135,343	15·7	515,958,196	69·0	114,710,793	747,804 332
1923	141,330,143	17·6	540,989,738	67·4	120.259,363	802,579,244
1924	153,586,690	17·2	601,256,447	67·3	138,523,730	893,366,867
1925	151,083,946	19·0	509,780,009	64·0	136,068,582	796,932,537
1926	163,731,210	17·6	608,618,542	65·6	154,978,980	927,328,732
1927	163,939,065	15·9	687,022,521	66·6	179,930,919	1,030,892,505
1928	186,435.824	16·7	718,896,270	64·9	203.624,372	1,108,956,466
1929	194,041,381	15·3	868,012,229	68·6	203,625,481	1,265,679,091
1930	189,179,738	15·2	847,442,037	67·9	211,651,807	1,248,273,582
1931	149,497,392	16·5	584,407,018	64·5	172,708,285	906,612,695
1932	106,371,779	18·4	351,686,775	60·8	120,445,350	578,503,904
1933[2]	86,353,691	21·2	232,548,055	57·2	87,369,583	406,271,329

[1] Nine months. [2] Preliminary figures.

7.—Percentage Proportions of Imports from United Kingdom and United States respectively, to Totals of Dutiable and Free in the 26 fiscal years 1907-32.

NOTE.—For the years 1868 to 1906, see Canada Year Book, 1927-28, p. 499.

Fiscal Year.	United Kingdom.			United States.		
	Dutiable to Total Dutiable.	Free to Total Free.	Dutiable and Free to All Imports.	Dutiable to Total Dutiable.	Free to Total Free.	Dutiable and Free to All Imports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1907 (9 months)	32·05	16·04	25·79	51·93	71·28	50·50
1908	32·64	17·35	26·83	50·59	70·51	58·16
1909	29·84	16·31	24·52	51·76	70·20	59·00
1910	31·60	16·49	25·78	52·29	69·22	58·81
1911	29·82	15·05	24·34	54·14	72·05	60·84
1912	26·69	14·72	22·42	58·72	71·74	73·37
1913	24·47	13·43	20·71	62·57	69·78	65·03
1914	24·95	14·26	21·35	60·81	70·16	63·96
1915	24·31	12·61	19·79	60·27	72·85	65·13
1916	17·97	11·63	15·24	68·93	78·29	72·95
1917	16·35	8·24	12·67	71·91	86·59	78·57
1918	10·70	5·54	8·45	79·61	86·29	82·27
1919	9·50	5·90	7·97	79·10	84·74	81·50
1920	13·44	8·93	11·87	72·04	81·26	75·25
1921	20·07	11·17	17·25	64·19	79·51	69·04
1922	19·20	8·72	15·66	62·97	80·88	69·02
1923	21·61	9·49	17·61	61·85	78·66	67·41
1924	21·32	9·12	17·19	60·20	81·21	67·30
1925	24·16	9·40	18·96	55·63	79·36	64·00
1926	22·83	8·89	17·65	57·97	78·94	65·76
1927	20·44	7·81	15·90	59·52	79·53	66·73
1928	21·13	8·98	16·76	58·59	76·06	64·87
1929	18·82	8·91	15·34	63·82	77·40	68·56
1930	18·14	9·45	15·16	63·88	75·55	67·89
1931	18·91	12·31	16·49	62·65	67·59	64·46
1932	20·51	14·04	18·39	59·11	64·23	60·78

8.—Average ad valorem Rates of Duty Collected on Dutiable and Total Imports from United Kingdom, United States and all Countries in the 65 fiscal years 1868-1932.

Fiscal Year.	U.K.		U.S.		AllCountries.		Fiscal Year.	U.K.		U.S.		AllCountries.	
	Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.		Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1868	–	–	–	–	20·2	13·1	1901	24·7	18·3	24·8	12·4	27·5	16·4
1869	16·9	13·5	20·1	7·3	20·2	13·1	1902	24·0	17·2	25·2	13·2	27·3	16·5
1870	16·8	13·4	19·5	7·8	20·9	14·1	1903	23·3	16·7	24·9	13·3	27·1	16·5
1871	16·4	13·5	16·3	8·4	19·6	14·0	1904	24·1	17·6	25·2	13·6	27·5	16·8
1872	16·4	12·7	18·0	7·1	19·1	12·4	1905	24·8	18·5	26·1	13·5	27·8	16·7
1873	15·6	10·9	17·7	6·5	18·3	10·4	1906	24·6	18·7	24·8	13·1	27·0	16·4
1874	16·5	12·8	17·4	7·1	18·9	11·7	1907(9 ms.)	24·3	18·4	24·2	12·8	26·5	16·1
1875	18·1	14·8	17·3	7·9	19·6	13·1	1908	24·2	18·3	24·6	13·2	26·7	16·5
1876	18·8	15·0	19·2	9·3	21·3	13·9	1909	25·8	19·0	24·9	13·2	27·5	16·7
1877	19·4	16·2	18·7	7·9	20·6	13·3	1910	25·1	18·9	24·8	13·5	26·8	16·5
1878	20·1	17·3	20·4	9·4	21·4	14·2	1911	24·6	18·9	24·7	13·7	25·9	16·2
1879	20·5	18·0	23·2	13·1	23·3	16·4	1912	25·0	19·1	25·0	14·8	26·1	16·8
1880	24·0	20·0	23·1	16·0	26·1	20·2	1913	25·1	19·6	24·9	15·8	26·1	17·1
1881	24·5	20·5	22·0	15·5	25·8	20·4	1914	25·2	19·5	24·8	15·6	26·1	17·3
1882	24·1	19·9	21·5	15·0	25·3	19·5	1915	27·1	20·5	25·1	14·2	27·4	16·8
1883	24·3	19·2	21·1	14·8	25·3	19·0	1916	28·4	19·1	25·0	13·5	27·2	15·5
1884	24·4	19·1	20·7	14·9	25·2	19·0	1917	24·9	17·6	22·7	11·4	23·8	13·0
1885	24·8	19·0	21·2	14·5	26·1	19·2	1918	24·3	17·3	20·5	11·1	21·5	12·1
1886	25·7	20·0	22·8	15·8	27·5	20·2	1919	22·3	15·3	20·9	11·6	21·5	12·3
1887	26·1	20·8	23·8	16·2	28·7	21·3	1920	22·1	16·2	22·5	14·0	22·5	14·7
1888	29·1	22·9	26·2	15·3	31·8	22·0	1921	20·9	16·6	20·3	12·9	20·6	14·1
1889	29·3	22·4	25·4	14·7	31·9	21·8	1922	24·8	20·1	23·0	13·9	24·5	16·2
1890	28·8	22·1	26·6	15·8	31·0	21·4	1923	24·5	20·1	22·5	13·8	24·9	16·7
1891	29·0	21·7	26·0	14·9	31·4	21·0	1924	22·3	18·3	22·3	13·2	22·9	15·1
1892	29·4	22·1	26·5	16·1	29·7	17·8	1925	22·1	18·2	23·1	13·0	23·3	15·1
1893	29·8	22·3	26·7	14·6	30·3	18·4	1926	21·6	18·4	23·9	13·2	24·7	15·5
1894	30·0	22·3	27·0	13·7	30·9	17·8	1927	23·9	19·7	23·1	13·2	24·1	15·4
1895	30·1	22·6	26·7	13·7	30·5	17·8	1928	25·6	20·6	23·3	13·5	24·2	15·5
1896	30·2	22·4	26·7	14·5	30·0	19·2	1929	25·9	20·6	23·4	14·1	24·4	15·8
1897	30·7	21·1	26·7	14·3	30·0	18·7	1930	25·5	20·0	23·3	14·4	24·3	15·9
1898	29·5	20·8	26·1	13·3	29·7	17·5	1931	26·9	19·5	24·8	15·2	26·0	16·4
1899	26·6	19·8	26·3	13·2	28·8	17·2	1932	29·2	21·9	27·4	17·9	29·3	19·7
1900	25·6	18·2	25·0	13·2	27·7	16·7							

9.—Imports for Home Consumption of certain Raw Materials Used in Canadian Manufactures, fiscal years 1911-33.

NOTE.—For the years 1902 to 1910, see Canada Year Book, 1926, p. 463.

Fiscal Year.	Sugar, Raw.	Vegetable Oil for Soap Industry.	Crude Cotton-seed Oil.	Raw Rubber (including Balata).	Tobacco, Raw.	Hides and Skins.	Cotton, Raw (including Linters).	Hemp, Dressed or Undressed.	Silk, Raw, etc.
	ton.	gal.	cwt.	cwt.	lb.	$	cwt.	cwt.	lb.
1911....	271,532	297,338	–	28,035	17,204,271	8,105,330	812,622	81,017	121,748
1912....	281,402	407,825	80,916	44,313	17,203,513	8,903,727	727,939	82,661	112,581
1913....	310,101	393,239	243,872	56,755	22,153,588	13,486,459	774,578	64,990	75,776
1914....	347,168	393,862	265,789	44,504	17,598,449	8,831,010	769,930	55,572	101,669
1915....	335,820	411,797	293,849	65,045	18,595,957	12,842,558	730,325	55,370	94,458
1916...	298,433	615,923	430,013	99,132	20,834,672	12,441,731	969,679	50,914	80,745
1917....	365,772	1,267,174	315,621	107,580	17,702,637	12,873,970	877,634	15,846	138,765
1918....	382,807	2,081,672	408,850	130,956	17,824,947	8,796,966	880,374	45,177	158,648
1919....	359,470	2,390,107	459,685	192,272	25,103,080	5,427,544	1,117,235	72,887	213,441
1920....	540,787	861,462	578,986	244,335	24,345,295	22,654,661	964,715	46,553	298,985
1921....	347,504	1,103,672	417,301	228,062	20,007,411	10,652,787	986,315	47,090	272,508
1922....	432,212	1,342,390	488,683	189,525	20,870,509	5,898,087	953,860	77,833	371,570
1923....	571,728	1,928,386	258,381	253,957	14,548,694	7,947,410	1,252,615	203,844	368,026
1924....	419,710	1,886,162	216,082	288,857	15,941,339	461,581[1]	955,966	340,402	335,495
1925....	419,371	1,692,744	213,201	344,509	13,712,885	502,586[1]	1,008,793	249,032	361,403
1926....	579,272	2,591,232	335,755	469,893	14,943,864	534,089[1]	1,355,738	281,639	529,446
1927....	564,779	3,177,800	297,706	502,312	17,446,774	579,085[1]	1,497,438	123,426	679,923
1928....	447,389	3,377,856	623,148	582,039	18,475,772	678,670[1]	1,462,246	99,503	938,459
1929....	409,585	3,241,587	302,197	777,169	18,726,618	507,773[1]	1,511,270	27,390	1,282,815
1930....	402,871	2,874,972	400,653	733,400	17,113,472	486,442[1]	1,260,699	42,620	1,668,972
1931....	415,090	3,080,061	174,711	595,591	16,580,394	345,439[1]	1,067,222	28,423	1,954,395
1932....	405,687	3,073,477	386,275	552,694	13,075,335	281,316[1]	1,009,023	18,348	2,539,133
1933[5]....	441,557	3,689,995	390,055	552,740	10,199,212	268,355[1]	1,009,073	15,810	2,572,949

Fiscal Year.	Wool, Raw.[2]	Noils and Worsted Tops.	Artificial Silk Rovings, Yarns, etc.	Manila Grass and Sisal.	Rags, Waste Paper and other Waste.	Iron Ore.	Alumina, Bauxite, Cryolite.	Tin in Blocks, Ingots, etc.	Crude Petroleum for Refining.[4]
	cwt.	$	lb.	cwt.	cwt.	ton.	cwt.	cwt.	gal.
1911....	64,224	778,320	–	272,638	536,604	–	186,152	35,706	54,310,597
1912....	71,954	689,304	–	290,362	564,296	–	218,998	41,740	72,231,006
1913....	92,092	980,432	115,710	343,644	750,003	2,116,933	276,170	51,319	143,338,070
1914....	72,521	1,072,066	129,982	189,010	716,882	1,972,207	312,259	46,076	177,879,835
1915....	131,940	1,312,885	128,148	283,660	540,922	1,055,724	261,553	29,402	196,203,287
1916....	211,407	2,587,949	183,278	382,233	510,472	1,595,995	385,959	32,756	186,753,081
1917....	145,812	2,988,177	276,873	323,441	780,062	2,318,547	816,509	35,726	135,533,089
1918....	115,380	4,418,854	160,090	491,739	505,643	2,203,506	1,664,799	38,683	191,376,057
1919....	158,767	5,314,793	161,206	314,150	570,211	2,227,919	1,916,929	28,044	260,819,944
1920....	117,717	5,847,787	360,297	453,853	826,593	1,632,011	451,349	44,010	298,540,725
1921....	92,772	5,533,108[3]	512,109	453,754	1,142,850	1,950,291	1,198,605	42,727	311,719,057
1922....	125,867	7,225,381[3]	570,450	187,521	686,483	656,902	166,695	27,242	391,292,960
1923....	182,556	9,110,310[3]	933,791	216,818	870,542	1,044,999	792,210	39,258	397,603,716
1924....	193,217	8,606,179[3]	1,239,986	268,722	1,123,282	1,807,223	1,266,799	39,837	418,791,375
1925....	143,629	5,823,112[3]	1,684,811	255,317	1,232,567	911,586	1,358,148	43,535	440,671,846
1926....	134,344	6,142,081[3]	1,689,730	439,699	1,307,473	1,053,593	1,336,538	44,409	470,616,511
1927....	164,234	7,887,487[3]	1,516,448	519,807	1,364,897	1,445,504	1,647,244	50,858	596,466,714
1928....	138,957	8,133,120[3]	1,563,020	524,124	1,371,469	1,491,234	2,663,166	48,742	709,959,837
1929....	140,219	8,646,998[3]	2,240,704	745,831	1,314,494	2,272,130	3,444,911	58,928	865,335,849
1930....	103,343	6,293,863[3]	2,132,362	459,588	1,606,931	2,456,919	2,738,777	56,318	1,110,169,704
1931....	107,449	6,649,268[3]	2,569,574	485,442	1,254,557	1,428,970	2,221,550	49,727	994,384,918
1932....	96,245	7,369,400[3]	1,501,739	468,443	1,363,974	802,163	1,704,029	38,095	1,016,355,361
1933[5]....	83,557	8,007,079[3]	958,047	749,014	792,085	66,514	745,455	28,763	845,587,999

[1] Cwt. [2] Includes hair of the camel, alpaca, goat, etc. [3] Pounds. [4] Prior to 1917 includes all crude petroleum. [5] Preliminary figures.

10.—Exports to the United Kingdom, to the United States and to All Countries, by Classes of Merchandise the Produce of Canada, by Values and Percentages, fiscal years 1929-32.

VALUES.

Class.	1929.			1930.			1931.			1932.		
	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.
	$	$	$	$	$	$	$	$	$	$	$	$
Vegetable products (except chemicals, fibres and wood)	325,105,581	58,527,194	646,514,058	186,521,591	48,626,508	384,635,751	141,108,053	27,644,374	292,280,037	98,725,113	11,035,258	204,398,365
Animals and their products (except chemicals and fibres)	47,644,803	84,993,501	158,757,272	40,673,780	66,894,165	133,009,145	31,173,615	34,068,408	83,714,772	32,028,165	22,342,515	68,798,683
Fibres, textiles and textile products	810,836	4,930,498	9,678,019	976,568	3,961,130	9,066,226	1,048,925	2,068,531	6,504,182	1,386,235	1,743,794	5,512,130
Wood, wood products and paper	22,350,947	235,665,010	288,621,745	21,450,183	237,669,413	289,566,675	17,350,424	188,949,408	230,604,474	13,734,973	140,473,352	175,740,269
Iron and its products	8,721,020	11,157,421	82,256,717	6,848,000	11,635,491	78,589,580	4,073,233	6,118,120	38,937,661	3,798,363	3,097,883	15,462,977
Non-ferrous metals and their products	16,347,438	63,221,555	112,778,194	15,404,363	101,728,976	154,319,429	17,153,570	58,835,683	95,652,063	17,266,439	36,176,490	69,072,888
Non-metallic minerals and their products (except chemicals)	1,771,253	17,994,515	27,401,790	1,952,156	18,662,256	28,545,096	1,546,819	13,255,258	21,107,780	894,408	8,233,323	13,456,701
Chemicals and allied products	4,036,885	10,779,475	19,438,064	4,888,740	12,535,510	22,468,462	2,714,386	6,361,691	12,825,852	3,130,795	4,123,489	10,535,038
Miscellaneous commodities	2,941,722	12,342,976	18,263,813	3,030,584	13,336,314	20,057,938	3,077,474	12,359,090	18,115,846	3,079,234	7,960,570	13,367,251
Totals	**429,730,485**	**499,612,145**	**1,363,709,672**	**281,745,965**	**515,049,763**	**1,120,258,302**	**219,246,499**	**349,660,563**	**799,742,667**	**174,043,725**	**235,186,674**	**576,344,302**

PERCENTAGES OF EACH CLASS.

Class.	1929.			1930.			1931.			1932.		
	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Vegetable products (except chemicals, fibres and wood)	75·65	11·71	47·41	66·18	9·49	34·33	64·36	7·91	36·55	56·73	4·69	35·46
Animals and their products (except chemicals and fibres)	11·09	17·02	11·64	14·43	12·98	11·87	14·22	9·75	10·47	18·40	9·50	11·94
Fibres, textiles and textile products	0·19	0·99	0·71	0·35	0·77	0·81	0·49	0·59	0·81	0·80	0·74	0·96
Wood, wood products and paper	5·20	47·16	21·16	7·64	46·10	25·84	7·92	54·04	28·83	7·89	59·74	30·49
Iron and its products	2·03	2·23	6·03	2·43	2·26	7·02	1·85	1·74	4·87	2·18	1·32	2·68
Non-ferrous metals and their products	3·80	12·66	8·27	5·46	19·76	13·78	7·82	16·83	11·96	9·92	15·38	11·99
Non-metallic minerals and their products (except chemicals)	0·41	3·60	2·01	0·69	3·62	2·55	0·70	3·79	2·64	0·51	3·50	2·33
Chemicals and allied products	0·94	2·16	1·43	1·74	2·43	2·01	1·23	1·82	1·60	1·80	1·75	1·83
Miscellaneous commodities	0·69	2·47	1·34	1·08	2·59	1·79	1·41	3·53	2·27	1·77	3·38	2·32
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**

11.—Imports from the United Kingdom, from the United States and from All Countries, by Classes of Merchandise Entered for Home Consumption, by Values and Percentages, fiscal years 1929-32.

Class.	1929.			1930.			1931.			1932.		
	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.
VALUES.												
	$	$	$	$	$	$	$	$	$	$	$	$
Agricultural and vegetable products (except chemicals, fibres and wood)	53,670,561	103,667,472	233,130,244	51,279,282	98,752,133	227,048,817	41,762,787	67,580,381	177,628,778	30,220,997	44,578,848	128,621,260
Animal products (except chemicals and fibres)	5,664,451	42,654,255	71,661,754	5,288,528	37,388,126	69,853,833	3,783,222	26,153,435	45,995,705	2,614,531	14,184,530	24,563,246
Fibres, textiles and textile products	77,021,060	81,889,787	206,439,173	68,243,821	71,997,597	185,241,252	49,207,120	48,244,419	130,717,022	30,549,937	30,944,027	83,879,362
Wood, wood products and paper	4,935,029	50,564,294	59,214,818	5,250,702	51,736,243	60,951,077	4,540,804	38,138,028	46,042,029	3,827,024	25,584,827	32,008,168
Iron and its products	18,802,533	316,095,527	345,194,597	21,323,484	282,192,471	314,366,791	18,069,505	167,674,719	193,933,477	13,383,622	81,005,384	98,811,706
Non-ferrous metals and their products	6,853,173	63,117,952	76,858,365	7,828,832	75,683,919	90,421,154	6,320,121	49,161,117	60,595,034	4,284,756	27,026,602	34,301,105
Non-metallic minerals and their products (except chemicals)	12,100,661	135,154,049	166,964,231	13,601,753	149,293,985	186,496,388	12,902,472	118,984,418	153,578,658	10,286,241	77,871,155	102,147,347
Chemicals and allied products	4,963,687	26,202,978	37,723,046	5,428,765	26,982,460	39,907,503	4,601,666	23,201,992	35,650,772	4,096,696	20,359,822	30,731,345
Miscellaneous commodities	10,030,226	48,665,915	68,492,863	10,934,571	53,415,103	73,986,767	8,309,695	45,268,509	62,471,220	7,107,975	30,131,580	43,440,365
Totals	**194,041,381**	**868,012,229**	**1,265,679,091**	**189,179,738**	**847,442,037**	**1,248,273,582**	**149,497,392**	**584,407,018**	**906,612,695**	**106,371,779**	**351,686,775**	**578,503,904**
PERCENTAGES OF EACH CLASS.												
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Agricultural and vegetable products (except chemicals, fibres and wood)	27·67	11·95	18·42	27·11	11·65	18·20	27·94	11·56	19·59	28·41	12·68	22·22
Animal products (except chemicals and fibres)	2·92	4·92	5·66	2·80	4·41	5·59	2·53	4·48	5·07	2·46	4·03	4·25
Fibres, textiles and textile products	39·69	9·44	16·32	36·08	8·50	14·85	32·92	8·26	14·42	28·72	8·80	14·51
Wood, wood products and paper	2·54	5·82	4·68	2·77	6·11	4·88	3·04	6·53	5·08	3·60	7·27	5·53
Iron and its products	9·69	36·40	27·27	11·26	33·29	25·18	12·07	28·68	21·40	12·58	23·03	17·08
Non-ferrous metals and their products	3·53	7·27	6·07	4·14	8·94	7·24	4·23	8·41	6·68	4·03	7·68	5·93
Non-metallic minerals and their products (except chemicals)	6·24	15·57	13·19	7·19	17·62	14·94	8·63	20·36	16·94	9·67	22·15	17·66
Chemicals and allied products	2·55	3·02	2·98	2·87	3·18	3·20	3·08	3·97	3·93	3·85	5·79	5·31
Miscellaneous commodities	5·17	5·61	5·41	5·78	6·30	5·92	5·56	7·75	6·89	6·68	8·57	7·51
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	I. Agricultural and Vegetable Products.					
	A. MAINLY FOOD.					
	Fruits—					
	Fresh—					
1	Apples	brl.	866,003	1,558,375	1,167,736	1,422,603
		$	3,884,822	6,626,009	5,091,415	5,577,339
2	Berries	$	186	2,555	990	820
3	Canned or preserved	lb.	4,731,935	3,842,377	2,783,224	6,774,912
		$	353,143	288,360	194,163	392,117
4	Juices and syrups, n.o.p.	gal.	308,069	318,839	246,407	230,210
		$	202,627	210,709	157,362	175,758
	Totals, Fruits[1]	$	4,530,321	7,193,230	5,523,656	6,194,367
	Vegetables—					
	Fresh—					
5	Beets, sugar	ton	–	–	–	–
		$	–	–	–	–
6	Potatoes	bush.	–	–	–	–
		$	–	–	–	–
7	Turnips	bush.	–	–	–	–
		$	–	–	–	–
8	Canned	lb.	14,075,970	6,400,027	8,301,431	9,077,018
		$	1,019,899	408,196	500,010	454,125
9	Pickles	$	433,657	549,668	1,346,262	1,512,530
	Totals, Vegetables[1]	$	1,453,899	957,874	1,846,272	1,966,655
	Grains and Farinaceous Products—					
	Grains—					
10	Barley	bush.	25,960,614	11,301,028	2,235,137	8,168,571
		$	17,552,851	7,560,339	686,120	3,025,852
11	Beans	bush.	88	38	84	12,858
		$	418	260	436	8,395
12	Buckwheat	bush.	205,052	12,595	36,544	170,507
		$	180,313	10,302	20,302	76,093
13	Oats	bush.	6,298,471	2,373,314	850,599	6,082,621
		$	4,043,185	1,452,935	303,816	1,971,456
14	Peas, whole	bush.	19,866	5,695	9,138	8,685
		$	83,129	26,160	39,971	29,748
15	Rye	bush.	4,646,828	358,088	1,082,433	2,116,572
		$	5,368,687	286,074	398,546	916,138
16	Wheat	bush.	229,801,402	113,224,273	131,679,398	110,552,532
		$	260,008,624	139,798,345	106,759,872	65,302,614
	Totals, Grains[1]	$	287,246,190	149,138,627	108,209,063	71,330,905
	Milled Products—					
17	Bran, shorts and middlings	cwt.	1,680	88,043	13,602	204,889
		$	3,101	114,339	18,928	171,709
18	Oatmeal	cwt.	388,055	331,390	427,580	650,395
		$	2,072,979	2,010,839	2,216,712	2,201,827
19	Wheat flour	brl.	2,775,924	2,278,916	2,727,865	2,065,077
		$	16,971,984	14,077,257	12,540,874	7,317,910
	Totals, Milled Products[1]	$	19,068,560	16,227,816	14,786,687	9,713,893
20	Cereal foods, prepared	$	2,176,645	2,384,994	2,441,154	2,323,635
21	Malt	$	–	–	36	–
	Totals, Grains and Farinaceous Products[1]	$	308,553,517	167,762,533	125,444,100	83,421,504
	Sugar and Its Products—					
22	Candy	lb.	7,750	5,176	5,583	3,493
		$	3,129	2,568	2,118	1,260
23	Maple sugar and syrup	$	13,207	8,147	16,024	–
24	Sugar, n.o.p.	cwt.	127,609	–	–	–
		$	621,186	–	–	–
	Totals, Sugar and Its Products[1]	$	733,086	125,868	94,380	104,987
25	Hops	lb.	307,240	232,272	196,393	42,191
		$	90,189	62,704	45,802	4,876
	Totals, Agricultural and Vegetable Products—A. MAINLY FOOD[1]	**$**	**315,417,085**	**176,132,354**	**132,984,168**	**91,705,797**

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
48.089	115,007	52,039	17,292	1,080,527	1,882,280	1,664,739	1,658,882	1
252.508	526,410	253,567	68,030	4,867,180	8,111,943	7,095,719	6,537,584	
279,359	490,716	595,799	229,568	282,384	493,618	597,477	231,240	2
19,634	167,345	375,454	128,842	5,085,895	4,254,466	3,444,304	7,263,489	3
2,375	15,108	29,269	12,277	390,087	331,242	255,591	431,813	
10,564	6,408	116	3,780	346,664	367,244	273,731	260,959	4
5,793	3,818	114	2,603	243,763	252,758	180,973	197,142	
567,490	1,080,219	892,847	319,623	5.917,152	9,593,484	8,403,141	7,507,040	
40,646	42,772	47,551	6,115	40,646	42,772	47,551	6,115	5
245,521	241,860	288,346	33,198	245,521	241,860	288,346	33,198	
1,873.317	5.393,657	5,010,348	2,949,377	4,949,156	7,957,568	7,102,119	4,723,618	6
1,140,731	5.557,551	3,971,048	1,472,510	3,083,452	8,042,226	5,658,367	2,466,204	
2,829,590	2,668,696	1,911,025	1,954,615	2,852,171	2,682,299	1,928,332	1,967,162	7
626,872	1.088,618	539,009	367,481	633,485	1,094,668	545,682	371,411	
3,947,976	8,778.407	236,562	11,446,874	20,696,134	17,249,042	11,023,835	22,477,523	8
215,501	435,727	12,393	304,304	1,423,061	994,794	674,986	849,946	
16,590	12,252	570	2,923	486,824	589,490	1,377,228	1,538,447	9
2,411,458	7,547,813	4,896,832	2,406,728	6,083,673	11,240,747	8,695,725	5,554,068	
67,816	88.425	632,119	55.723	35,699,767	14,817,071	3,468,729	24,337,678	10
29.048	69,949	230,010	16,989	25,743,971	10,388,735	1,169,403	10,002,911	
44,324	218,277	23,956	10,283	45,976	222,047	25,620	26,327	11
207,387	742,904	65,231	16,693	214,645	758,505	70,918	29,939	
59,051	155.595	448,399	23,692	402,358	186,558	661,189	741,041	12
53,203	137,273	306,564	10,533	361,616	165,491	425,183	332,077	
31,662	33,988	817,414	46,729	15,657,348	6,406,181	3,258,501	13,841,300	13
22,611	20,150	164,038	13,456	10,241,938	4,055,855	1,146,266	4,662,335	
35,157	25,491	6,538	46,300	66,093	37,230	19,262	57,775	14
117,743	99,143	29,000	77,613	230,158	143,310	77,386	111,809	
–	42	63	348	9,456,512	1,526,368	1,327,453	4,359,813	15
–	45	111	169	10,809,020	1,451,640	534,549	2,025,199	
10,634,834	6,804,099	10,337,690	4,815,985	370,459,551	177,006,369	217,243,037	191,315,933	16
12,380,823	7,487,014	7,727,678	2,670,650	428,524,326	215,753,475	177,419,769	115,739,383	
12,816,939	8,557,205	8,523,162	2,809,583	476,186,733	232,763,740	180,874,218	132,930,429	
3,562,618	1,834.712	2,924,538	1,725,442	3,645,819	1,988,356	3,008,574	2,018,332	17
5,351,954	2,362,814	2,854,854	1,021,491	5,496,024	2,582,484	2,962,696	1,273,648	
13	3	5	1,150	598,412	407,050	488,334	798,840	18
86	15	21	1,512	3,073,375	2,440,968	2,523,868	2,633,632	
2,073	1,962	634	1,204	11,405,728	7,893,960	7,218,188	5,413,740	19
13,217	12.502	2.549	3,756	65,117,779	45,457,195	32,876,234	18,897,543	
5,367,586	2,377,666	2,867,320	1,029,197	73,796,136	50,549,600	38,407,020	22,881,956	
6,692	8,782	13,477	25,543	2,238,690	2,431,137	2,492,467	2,405,404	20
2,400	–	198,632	998,663	54,332	64,736	284,866	1,211,448	21
19.265,799	11,981,893	12,260,528	5,015,620	553,587,951	287,047,429	222,916,888	159,726,251	
10,345	2,139	2,300	1,259	1,681,007	1,858,519	1,411,004	899,877	22
4,529	703	570	405	501,255	526,776	393,477	233,867	
1,350,140	2,404,046	1,466,921	562,467	1,365,927	2,415,087	1,486,005	576,346	23
216	16,029	3,069	13	419,950	294,823	187,754	140,825	
1,045	79,646	15,092	112	2,176,348	1,423,936	904,209	687,150	24
1,422,954	2,648,605	1,711,914	677,462	4,329,822	4,798,712	3,188,138	1,753,174	
417	–	–	–	322,039	250.723	216.065	54,819	25
58	–	–	–	92,505	64,561	48,362	6,204	
23,710,930	**23,312,016**	**19,820,570**	**8,484,020**	**570,253,275**	**313,005,450**	**243,509,342**	**174,768,000**	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	I. Agricultural and Vegetable Products—con.					
	B. OTHER THAN FOOD.					
	Beverages—					
1	Brewed (ale, beer)	gal.	–	–	18	103
		$	–	–	42	183
	Distilled—					
2	Whiskey	gal.	20,829	30,676	12,649	20,389
		$	85,758	95,005	41,291	72,786
3	Other	gal.	11	9,999	2,504	10
		$	60	35,436	7,001	74
4	Fermented (wines)	gal.	133	164	135	205
		$	214	247	206	277
	Totals, Beverages	$	86,032	130,688	48,540	73,320
5	Oil cake and meal	cwt.	12,880	1,680	2,812	45,448
		$	30,540	4,580	5,410	60,182
	Rubber—					
6	Raw and waste	$	802	3,202	206	–
7	Belting	lb.	218,418	384,775	365,866	225,425
		$	75,076	126,297	112,012	65,239
8	Canvas shoes with rubber soles	pair	1,213,394	2,048,676	1,812,256	756,828
		$	893,059	1,432,964	1,255,600	486,329
9	Boots and shoes, rubber, n.o.p	pair	1,398,976	1,175,607	991,995	963,670
		$	2,364,776	1,937,227	1,578,038	1,340,048
10	Hose	$	29,979	30,961	34,153	8,418
11	Tires, automobile casings	No.	100,062	40,455	10,034	4,072
		$	1,166,614	428,958	110,110	14,870
12	Tires and tubes, other	$	98,083	24,621	4,557	17
13	Other manufactures	$	1,095,842	2,589,601	1,987,353	1,498,425
	Totals, Rubber	$	5,724,231	6,573,835	5,082,029	3,413,346
	Seeds—					
14	Clover	bush.	21,169	41,794	30,365	97,146
		$	229,379	325,075	231,958	664,590
15	Flaxseed	bush.	1,164	2,937	745,262	4,872
		$	4,656	12,336	929,327	9,686
	Totals, Seeds[1]	$	269,986	375,300	1,186,928	686,466
	Tobacco—					
16	Unmanufactured	lb.	6,247,871	5,293,167	4,820,202	7,950,353
		$	1,926,085	1,389,334	1,415,103	2,500,060
17	Fodders, n.o.p	$	999,156	322,326	94,704	110,141
18	Hay	ton	47,621	105,184	19,240	12,598
		$	496,307	1,398,781	259,074	144,408
19	Senega root	lb.	100,942	183,683	19,968	45,645
		$	115,973	160,595	10,244	16,697
	Totals, Agricultural and Vegetable Products —B. OTHER THAN FOOD[1]	$	**9,688,496**	**10,389,237**	**8,123,885**	**7,019,316**
	Totals, Agricultural and Vegetable Products[1]	$	**325,105,581**	**186,521,591**	**141,108,053**	**98,725,113**
	II. Animals and Animal Products.					
	Animals, Living—					
20	For exhibition	$	7,050	150	4,123	25,200
21	Cattle for improvement of stock	No.	–	–	1	–
		$	–	–	3,000	–
	Other—					
22	Cattle, 1 year old or less	No.	–	–	–	–
		$	–	–	–	–
23	Cattle more than 1 year old	No.	405	–	6,223	26,734
		$	61,770	–	623,405	2,165,423
24	Horses	No.	2	7	25	10
		$	250	1,700	5,000	900
25	Poultry	No.	–	–	10,561	–
		$	–	–	2,814	–
26	Sheep	No.	–	–	–	–
		$	–	–	–	–

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
4,092,113	1,449,122	253,418	-	4,110,698	1,481,215	270,102	25,458	1
5,588,870	1,959,477	320,444	-	5,608,366	1,995,990	337,210	24,129	
1,126,399	1,050,681	171,608	-	2,355,431	2,904,579	3,239,164	2,512,607	2
18,111,595	16,405,341	2,681,244	-	24,122,725	25,856,136	18,722,198	11,622,256	
17,730	25,508	4,948	-	34,112	70,243	49,342	8,501	3
231,642	368,281	70,206	-	267,160	477,031	154,843	17,608	
38,722	35,487	10,539	-	40,046	36,598	11,441	1,778	4
118,591	113,198	69,592	-	120,656	115,081	71,793	2,346	
24,050,698	18,846,297	3,141,486	-	30,118,907	28,444,238	19,286,044	11,666,339	
285,367	443,615	201,660	47,850	425,527	530,229	312,336	281,411	5
692,577	1,086,558	379,655	60,515	1,047,993	1,302,956	564,596	374,905	
242,108	211 724	69,374	37,456	258,835	231,658	72,553	42,306	6
100	26	412	8,070	1,170,700	1,565,596	1,270,183	873,173	7
61	20	295	1,000	450,956	595,072	438,556	261,374	
2,555	418	427	101	7,621,156	9,654,627	5,217,179	2,372,796	8
2,415	541	461	60	5,177,217	6,517,089	3,577,980	1,508,835	
228	100	460	161	2,067,889	2,199,944	1,652,067	1,515,324	9
869	187	1,154	350	3,412,632	3,469,303	2,598,477	2,102,682	
61,625	48.249	39,410	26,546	268,698	269,196	205,681	102,116	10
2,187	3,062	2,778	8,702	1,722,502	1,663,128	1,153,660	614,106	11
23,533	32,047	15,202	30,560	16,646,374	15,873,678	10.508,716	4,696,432	
6,043	2,900	1,691	5,292	2,786,779	2,269,544	1,256,232	450,773	12
10,377	16,715	26,543	16,085	1,581,023	3,022,813	2,404,590	1,898,150	13
347,031	312,383	154,130	117,349	30,582,514	32,248,353	21,062,785	11,062,668	
176,838	109,055	34,676	5,360	216,722	165,798	75,055	126,303	14
1,529,144	872,623	278,501	27,868	1,890,451	1,316,752	580,077	776,406	
3,027,155	769,894	651,540	1,041,602	3.028,329	772,831	1,396,892	1,046,474	15
5,740,716	1,719,751	987,654	1,142,095	5,745,397	1,732,087	1,917,236	1,151,781	
7,503,126	2,709,119	1,499,924	1,213,127	7,944,625	3,237,744	2,819,096	1,992,371	
5,388	5,254	4,736	3,001	6,583,676	6,811,391	6,051,319	8,222,922	16
2,120	1,264	1,433	1,115	1,954,482	1,504,264	1,505,594	2,536,998	
823,693	934,223	999,054	537,101	2,071,822	1,446,677	1,206,218	857,330	17
50,433	35,719	119,464	32,814	113,763	162,188	156,722	56,281	18
440,427	321,854	1,094,720	254,040	1,127,270	2,007,944	1,590,657	523,102	
260,178	468,512	60,472	158,895	524,119	728,221	183,392	346,263	19
283,434	432,776	36,636	56,898	593,017	660,284	103,950	131,335	
34,816,264	**25,314,492**	**7,823,804**	**2,551,238**	**76,260,783**	**71,630,301**	**48,770,695**	**29,630,365**	
58,527,194	**48,626,508**	**27,644,374**	**11,035,258**	**646,514,058**	**384,635,751**	**292,289,037**	**204,398,365**	
384,335	273,441	250,138	210,330	392,435	277,959	254,261	238,565	20
3,387	4,061	2,485	5,139	3,516	4,209	2,646	5,274	21
556,058	708,011	472,147	536,674	589,213	748,575	544,110	556,129	
76,720	85,226	27,188	16,423	76,989	85,700	27,690	17,059	22
1,919,420	2,066,048	531,686	282,244	1,922,311	2,070,884	538,175	287,696	
157,731	147,045	9,720	5,813	160,411	149,463	18,920	35,846	23
11,987,127	10,142,460	837,998	451,674	12,182,519	10,300,003	1,717,913	2,790,959	
545	672	6,020	6,713	920	1,165	6,452	7,308	24
104,901	108,619	119,514	168,127	166,251	179,520	169,823	209,855	
674,061	660,222	98.122	67,041	676,239	662,291	111,114	74,903	25
591,631	543,938	66,825	61,635	594,064	546,504	72,313	66,876	
9,694	4,432	33	123	10.559	5,531	1,146	1,030	26
114,082	49,300	244	826	121,481	58,851	9,174	6,073	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	II. Animals and Animal Products—continued.					
	Other—concluded.					
1	Swine	No.	–	–	–	–
		$	–	–	–	–
2	Foxes	No.	121	200	194	77
		$	34,950	53,820	50,700	12,004
	Totals, Animals, Living[1]	$	110,580	66,821	692,931	2,205,347
3	Bones, horns and hoofs	$	493	–	–	–
	Fishery Products, n.o.p.—					
	Fish—					
	Fresh—					
4	Halibut	cwt.	499	–	–	5
		$	5,000	–	–	56
5	Herrings	cwt.	–	–	–	–
		$	–	–	–	–
6	Lobsters	cwt.	–	–	–	–
		$	–	–	–	–
7	Salmon or lake trout	cwt.	–	–	111	–
		$	–	–	1,333	–
8	Mackerel	cwt.	–	–	–	–
		$	–	–	–	–
9	Salmon	cwt.	15,126	21,935	31,996	26,909
		$	277,366	454,112	641,383	456,218
10	Smelts	cwt.	–	–	–	–
		$	–	–	–	–
11	Tullibee	cwt.	–	–	–	–
		$	–	–	–	–
12	Whitefish	cwt.	–	–	–	–
		$	–	–	–	–
	Totals, Fish, Fresh[1]	$	283,247	454,126	642,831	456,554
	Canned—					
13	Clams	cwt.	7	10	3	5
		$	122	157	52	66
14	Codfish, boneless	cwt.	11	–	–	–
		$	140	–	–	–
15	Lobsters	cwt.	22,971	28,650	22,060	28,646
		$	1,453,569	1,765,971	1,274,778	1,355,138
16	Salmon	cwt.	103,857	90,829	144,612	205,178
		$	1,902,627	1,857,726	3,116,037	3,646,393
17	Sardines	cwt.	52	200	–	407
		$	472	1,920	–	3,214
	Totals, Fish, Canned[1]	$	3,357,935	3,625,958	4,390,867	5,005,266
	Dried, Salted, Smoked, Pickled—					
18	Codfish, dried	cwt.	8,086	629	1,143	594
		$	65,830	6,657	9,929	4,315
19	Codfish, pickled	cwt.	–	–	–	–
		$	–	–	–	–
20	Codfish, smoked	cwt.	–	–	–	–
		$	–	–	–	–
21	Haddock	cwt.	–	35	4	–
		$	–	352	20	–
22	Herring, dry-salted	cwt.	–	–	–	–
		$	–	–	–	–
23	Herring, pickled	cwt.	–	–	4	–
		$	–	–	13	–
24	Herring, smoked	cwt.	15	20	12	21
		$	65	150	72	172
25	Mackerel, pickled	cwt.	–	–	–	–
		$	–	–	–	–
26	Pollock, hake and cusk, dried	cwt.	–	4	–	563
		$	–	16	–	2,590
27	Salmon, dry-salted (chum)	cwt.	2	–	–	–
		$	30	–	–	–
28	Salmon, pickled	cwt.	831	736	283	566
		$	11,392	20,502	6,186	9,826
	Totals, Fish, Dried, Salted, Smoked, Pickled[1]	$	77,317	27,677	16,220	16,931
	Totals, Fishery Products, n.o.p.[1]	$	3,719,872	4,107,761	5,051,110	5,481,301

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
6,758	1,793	244	1,166	9,298	3,730	2,267	3,714	1
111,739	44,711	2,659	6,834	131,983	63,550	21,397	26,071	
788	587	401	518	2,409	4,265	992	683	2
144,544	99,554	47,188	34,251	624,954	1,141,264	199,888	53,955	
16,154,716	14,264,837	2,489,136	1,852,811	17,034,157	15,771,020	3,769,548	4,367,085	
91,156	92,896	37,592	27,165	96,651	94,046	39,303	28,616	3
49,151	41,736	34,697	37,277	49,950	41,919	34,918	37,597	4
614,174	570,535	440,046	366,405	622,636	572,896	443,066	369,193	
382,925	307,544	190,717	102,954	383,377	309,912	190,995	103,265	5
571,599	448,624	411,838	306,382	574,807	455,587	413,601	308,081	
54,407	81,207	97,394	96,131	54,407	81,210	97,394	96,131	6
1,612,966	2,318,109	2,208,189	1,831,554	1,612,966	2,318,133	2,208,189	1,831,562	
47,637	45,644	34,365	25,570	47,637	45,644	34,482	25,570	7
564,149	524,606	369,917	244,993	564,149	524,606	371,352	244,993	
25,249	16,001	10,772	20,442	25,249	16,001	10,774	20,443	8
180,069	106,619	60,225	124,616	180,069	106,619	60,241	124,624	
62,437	45,868	50,954	55,490	84,714	76,983	94,353	113,195	9
660,064	635,323	698,202	517,571	1,051,199	1,225,013	1,496,924	1,213,679	
73,355	53,040	64,877	68,362	73,372	53,055	64,887	68,373	10
1,091.751	803.266	832,814	785,859	1,091,993	803,548	832,984	786,022	
96.960	74,167	36,110	36,868	96,960	74,167	36,110	36,868	11
718.681	620.428	267,420	203,400	718,681	620,428	267,420	203,400	
116.840	113.407	94,443	81,464	116,840	113,407	94,443	81,464	12
1,516,094	1,500.814	1,095,617	879,347	1,516,094	1,500,814	1,095,617	879,347	
10,793,156	10.825,680	9.436,690	7,850,402	11,257,772	11,484,241	10,292,840	8,605,189	
11,721	13,979	5,825	2,268	11,749	14,029	5,925	2,342	13
171,104	215,501	99,024	30,836	171,524	216,214	100,293	31,858	
27,504	28,168	19,233	19,679	27,581	28,313	19,523	20,138	14
288.369	279,619	192,292	190,092	289,281	281,159	195,466	194,970	
14,626	13,698	13,153	17,036	47,085	54,883	54,289	63,446	15
915,360	856,514	737,468	746,679	3,014,735	3,456,379	3,048,713	2,913,304	
793	144	92	30,009	651,100	547,769	427,387	473,077	16
8,539	1,753	1,036	163,903	9,108,342	8,302,468	6,317,741	6,078,853	
2	1	—	802	47,538	62,185	37,780	32,283	17
68	32	—	4,361	469,841	623,824	359,087	271,427	
1,407,221	1,358,382	1,037,036	1,143,124	13,272,129	13,067,116	10,117,022	9,543,527	
120,293	103,738	89.745	86,186	541,725	531,398	403,345	367,104	18
1,068,944	965.804	750.778	522,811	4,784,829	4,828,643	3,195,190	2,210,468	
80,784	72.827	100,733	66.811	80,903	83,242	105,887	70,545	19
374,545	349,726	440,699	256,072	375,073	388,207	459,058	271,767	
18,120	12,755	8,494	5,327	18,339	12,894	8,678	5,478	20
223,512	172,044	106,444	55,273	227,179	173,705	108,837	57,330	
23,442	20,873	18,339	10,420	42,505	40,608	36,971	21,040	21
189,068	188,997	177,899	95,676	321,596	331,221	299,863	151,949	
10	25	1,409	298	1,157,139	1,082,985	771,998	839,711	22
33	136	4,356	1,439	1,998,482	1,983,073	1,279,775	887,235	
17,341	20,298	11,275	5,932	55,186	48,613	47,584	28,591	23
76,300	84,506	45,357	21,596	172,943	184,819	171,672	87,586	
35,997	26,262	17,170	8,879	76,760	73,653	67,253	43,733	24
162,823	117,039	58,354	29,461	310,781	297,645	230,525	156,830	
12,082	11.488	14,728	14,498	63,281	79,128	90,894	80,403	25
101,741	86,422	88,325	75,074	397,015	483,436	492,985	350,005	
9.626	7,482	4,430	2,414	53,235	58,278	45,633	48,351	26
53,898	42,402	20,941	8,345	320,597	372,478	267,375	202,693	
25	3,010	41	19	211,600	107,015	123,449	434,491	27
100	3,398	151	116	775,295	330,357	359,367	771,122	
8,022	8,163	7,634	3,535	24,210	22,785	22,446	15,284	28
173,833	189,180	123,667	45,549	540,313	545.530	403,654	188,010	
2,551,374	2,324,676	1,883,153	1,135,089	10,399,712	10,152,994	7,427,499	5,445,514	
15,513,738	14,928,048	12,953,060	10,651,533	36,156,069	35,697,027	28,894,983	24,437,078	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	II. Animals and Animal Products—continued.					
	Furs, Hides and Leather—					
	Furs—					
	Undressed—					
1	Beaver	No.	36,510	37,022	30,122	29,424
		$	952,143	1,074,736	653,660	422,344
2	Fox, black and silver	No.	19,765	28,871	65,618	90,307
		$	1,915,774	2,039,252	3,082,948	2,476,781
3	Fox, other	No.	32,028	30,359	39,445	74,039
		$	1,331,563	1,517,531	1,548,185	1,379,320
4	Marten	No.	25,595	22,353	17,650	16,203
		$	748,940	723,603	366,135	217,639
5	Mink	No.	36,315	51,467	56,260	63,854
		$	614,357	971,480	625,180	400,499
6	Muskrat	No.	1,337,590	1,436,962	1,153,549	1,282,093
		$	2,052,505	1,847,337	829,923	793,824
7	Other	$	2,422,568	2,140,254	999,786	820,130
8	Dressed	$	3,728	3,395	17,832	3,467
9	Manufactures	$	20,451	18,314	12,961	7,699
	Totals, Furs	$	10,062,029	10,335,902	8,136,610	6,385,578
10	Hair	$	123,929	85,662	13,047	11,047
	Hides and Skins, Raw—					
11	Calf	cwt.	19	–	–	
		$	370	–	–	–
12	Cattle	cwt.	643	–	12,794	4,944
		$	8,059	–	91,943	37,244
13	Horse	cwt.	–	–	–	–
		$	–	–	–	–
14	Sheep	cwt.	48	–	–	–
		$	2,627	–	–	–
	Totals, Hides and Skins[1]	$	11,866	8,334	92,337	37,491
	Leather, Unmanufactured—					
15	Harness	$	–	–	114	212
16	Sole	lb.	1,703,244	819,195	292,024	451,638
		$	645,434	287,384	116,073	153,952
17	Upper	$	1,357,797	902,989	923,789	1,379,102
	Totals, Leather, Unmanufactured[1]	$	2,011,513	1,201,162	1,062,592	1,571,377
	Leather, Manufactured—					
18	Boots and shoes	$	26,764	12,556	12,480	5,246
	Totals, Leather and Manufactures of[1]	$	2,064,514	1,276,017	1,125,073	1,706,827
	Meats—					
	Fresh—					
19	Beef	cwt.	66	–	2,889	4,781
		$	2,452	–	25,039	28,776
20	Mutton	cwt.	–	–	–	–
		$	–	–	–	–
21	Pork	cwt.	4,707	36	966	6,817
		$	91,930	637	15,160	71,133
22	Poultry	$	62,157	46,852	9,707	39,284
	Cured, Canned or Prepared—					
23	Bacon and hams	cwt.	329,754	241,324	105,249	150,276
		$	6,636,497	5,555,743	2,278,616	1,751,231
24	Beef, pickled	cwt.	–	–	–	–
		$	–	–	–	–
25	Canned meats	lb.	183,610	45,349	64,559	15,617
		$	76,822	10,984	14,164	4,675
26	Pork, dry-salted	cwt.	9,324	46,274	5,839	11,389
		$	176,112	921,379	127,821	101,937
27	Pork, pickled	cwt.	141	18	26	38
		$	2,001	283	591	306
28	Soups, all kinds	$	343,656	559,582	619,840	665,554
	Totals, Meats[1]	$	7,519,384	7,169,425	3,211,075	2,818,472

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
79,445	44,890	46,467	54,869	118,145	84,296	78,540	85,296	1
2,152,918	1,299,410	973,066	761,217	3,156,712	2,426,613	1,664,064	1,197,208	
2,989	1,348	6,604	7,606	30,290	35,618	95,034	136,294	2
331,246	113,394	336,707	222,448	3,037,367	2,575,905	4,599,661	3,900,673	
47,357	31,024	24,127	31,670	79,898	63,841	64,131	107,540	3
1,802,085	1,007,979	664,410	639,768	3,156,205	2,577,010	2,235,269	2,051,383	
21,939	9,511	8,575	10,853	48,192	32,409	26,568	27,093	4
691,272	278,936	174,869	155,134	1,458,195	1,019,317	549,502	373,520	
77,309	43,615	66,507	76,994	115,194	97,019	124,339	141,668	5
1,712,220	806,990	839,764	697,140	2,345,194	1,825,222	1,487,894	1,105,716	
709,849	574,724	496,344	780,776	2,137,349	2,091,507	1,704,501	2,082,356	6
1,056,417	821,759	390,963	622,631	3,252,169	2,782,262	1,264,892	1,429,494	
5,347,223	3,274,814	2,088,253	1,199,662	7,844,330	5,499,982	3,135,531	2,052,163	7
91,711	57,282	32,104	19,974	176,944	104,180	78,753	51,789	8
95,843	89,643	52,652	43,427	137,838	135,609	78,232	56,153	9
13,280,936	7,750,207	5,552,779	4,497,526	24,564,954	18,946,100	15,093,798	12,218,099	
273,012	286,417	220,750	129,170	471,359	465,874	324,789	209,128	10
85,611	65,881	53,440	33,666	86,697	66,709	55,371	36,319	11
2,220,995	1,295,396	824,825	293,102	2,250,727	1,314,781	854,889	320,988	
359,093	441,830	202,337	181,239	370,620	450,081	234,186	212,396	12
6,269,932	5,711,295	1,996,189	1,083,579	6,472,291	5,842,008	2,264,891	1,300,330	
20,101	32,691	18,569	15,562	20,101	32,691	18,569	15,562	13
219,476	243,389	104,003	60,543	219,476	243,389	104,003	60,543	
20,487	14,175	7,470	3,622	20,535	14,176	8,130	3,622	14
453,666	248,276	82,520	36,175	456,293	248,296	87,935	36,193	
9,244,131	7,572,463	3,048,355	1,500,429	9,479,691	7,730,914	3,352,967	1,745,331	
1,004,098	685,157	369,290	51,765	1,011,957	691,426	374,034	53,855	15
5,466,055	3,955,491	2,663,178	930,369	7,647,822	5,352,068	3,196,096	1,507,546	16
2,470,561	1,458,481	888,791	160,344	3,343,558	1,967,055	1,100,933	354,523	
3,547,801	2,619,897	1,391,562	610,889	5,157,194	3,777,127	2,555,751	2,359,785	17
7,091,188	4,812,320	2,672,487	827,797	9,591,900	6,496,951	4,077,664	2,816,587	
287,441	284,844	117,287	29,119	383,186	373,726	202,018	52,741	18
8,005,875	5,509,521	3,169,512	1,038,481	10,656,167	7,383,375	4,758,336	3,203,116	
411,532	258,285	29,233	3,402	432,856	284,113	61,168	33,446	19
6,604,512	4,115,626	465,473	37,212	6,990,868	4,592,786	915,813	376,035	
8,781	3,064	12	69	11,644	5,337	2,535	3,295	20
200,856	72,404	191	761	260,849	121,104	48,105	53,360	
72,137	30,938	7,455	10,640	79,464	33,808	11,217	20,576	21
1,460,009	621,682	189,526	179,678	1,595,246	677,094	254,838	288,933	
50,671	44,781	7,324	109,513	169,384	164,597	90,014	217,739	22
29,784	20,046	11,624	13,814	366,582	267,026	121,770	185,146	23
1,054,895	859,715	498,961	423,873	7,874,026	6,579,726	2,914,273	2,446,564	
7,195	9,010	1,256	69	7,775	9,078	2,073	738	24
106,212	135,066	21,668	983	113,855	136,083	28,266	5,582	
495	16,417	15,555	7,723	250,831	138,923	154,806	68,879	25
149	3,213	2,522	3,441	93,759	31,999	34,019	19,382	
–	6	32	32	13,002	50,808	7,057	13,088	26
–	235	1,100	898	250,485	1,005,186	154,553	119,694	
903	1,089	5,915	5,969	10,061	22,169	28,364	28,123	27
18,887	21,984	131,674	84,628	123,917	234,581	339,978	258,188	
20	143	58	4	353,730	573,925	633,363	672,857	28
10,382,736	6,446,315	1,678,486	1,010,888	19,184,930	15,030,671	6,104,976	4,930,816	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	II. Animals and Animal Products—concluded.					
	Milk and Its Products—					
1	Cream, fresh	gal.	714	–	–	–
		$	1,583	–	–	–
2	Milk, fresh	gal.	–	–	–	–
		$	–	–	–	–
3	Butter	cwt.	19	8	117	86,927
		$	841	338	3,266	1,822,481
4	Cheese	cwt.	1,025,387	831,562	736,266	813,106
		$	22,639,647	16,224,694	11,896,727	10,005,074
5	Milk powder	cwt.	36,631	41,295	42,625	39,378
		$	290,599	349,230	398,796	284,269
6	Milk, condensed	cwt.	16,295	13,076	8,550	6,538
		$	158,864	128,181	81,697	62,281
7	Milk, evaporated	cwt.	49,738	17,832	13,584	33,475
		$	445,993	157,499	115,142	236,644
	Totals, Milk and Its Products[1]	$	23,537,527	16,859,942	12,496,600	12,410,749
	Oils, Fats, Greases and Wax—					
8	Animal oils	gal.	–	–	364	325
		$	–	–	401	256
9	Fish, whale, etc., oils	gal.	2,149	48,951	592,587	85,380
		$	927	13,405	110,213	15,974
10	Grease and scraps	cwt.	–	–	–	–
		$	–	–	–	–
11	Lard	cwt.	291	11,633	1	53,438
		$	4,330	138,708	20	405,773
12	Lard compound	cwt.	20	49	1	56
		$	300	573	6	458
13	Tallow	cwt.	–	86	–	15,777
		$	–	558	–	47,916
	Totals, Oils, Fats, Greases and Wax[1]	$	6,652	154,418	118,551	474,928
14	Eggs	doz.	782,910	909,550	26,260	431,070
		$	264,880	337,812	9,607	96,911
15	Honey	lb.	346,271	1,218,044	1,275,776	1,948,047
		$	33,382	134,254	131,734	184,501
16	Sausage casings	$	121,991	83,628	49,771	39,347
17	Tankage	cwt.	–	–	–	–
		$	–	–	–	–
	Totals, Animals and Animal Products[1]	$	**47,644,803**	**40,673,780**	**31,173,615**	**32,028,165**
	III. Fibres and Textiles.					
	Cotton—					
18	Duck	yd.	69,137	71,464	56,735	138,510
		$	36,021	38,526	24,916	29,576
19	Other fabrics	yd.	33,341	13,627	29,576	46,325
		$	5,341	2,270	4,129	7,402
20	Underwear	$	19,768	32,050	29,876	24,776
	Totals, Cotton[1]	$	127,232	218,175	203,268	191,341
21	Flax, hemp and jute	$	4,766	2,441	891	922
22	Silk	$	1,980	999	1,121	1,462
	Wool—					
23	Raw	lb.	646,917	1,044,193	681,265	3,663,063
		$	210,570	222,029	99,336	331,346
	Totals, Wool[1]	$	222,550	234,517	113,923	341,006
24	Artificial silk	$	5,944	777	431	702
25	Rags	cwt.	23,267	25,980	16,667	14,840
		$	246,587	286,013	143,714	105,499
26	Binder twine	cwt.	–	2,737	38,304	59,786
		$	–	32,258	383,040	433,111
27	Bags, textile	$	64,531	40,762	26,048	34,570
28	Felt, mfrs.	$	84,936	112,931	124,822	149,849
29	Corsets and brassieres	No.	8,962	6,018	3,699	2,301
		$	18,145	12,901	9,945	4,261
30	Gloves, etc., textile	$	2,675	7,119	8,353	2,082
31	Socks and stockings	$	4,373	1,500	15,597	88,161
	Totals, Fibres and Textiles[1]	$	**810,836**	**976,568**	**1,048,925**	**1,386,235**

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
2,833,640	2,293,270	1,121,974	65,814	2,834,354	2,293,330	1,121,974	65,814	1
5,225,429	4,679,804	2,168,849	129,285	5,227,012	4,679,984	2,168,849	129,285	
3,753,871	3,099,754	1,208,478	362,764	2,753,871	3,099,754	1,208,478	362,764	2
833,678	699,190	239,814	51,806	833,678	699,190	239,814	51,806	
2,314	207	702	6,736	18,892	13,094	11,629	109,173	3
71,032	8,763	17,016	148,275	764,836	543,851	389,419	2,362,888	
74,119	67,867	32,701	15,747	1,126,092	922,937	795,904	854,247	4
1,869,525	1,498,833	546,691	197,483	25,181,853	18,278,004	12,989,726	10,593,967	
10,471	6,416	8,547	5,847	50,147	50,145	55,088	48,987	5
247,479	181,127	149,660	133,287	608,466	579,102	645,327	491,431	
19,392	10,117	13,964	–	207,869	154,795	119,443	74,074	6
180,182	98,426	115,783	5	2,364,967	1,731,840	1,361,304	865,106	
1,240	2,103	5	55	78,548	84,985	85,640	75,396	7
10,687	18,306	45	321	747,312	951,150	977,825	623,555	
8,473,375	7,205,673	3,249,421	660,467	35,763,487	27,484,354	18,787,543	15,118,063	
11,554	3,048	22,127	1,213	124,721	56,425	152,891	82,797	8
11,631	2,935	17,375	1,585	131,292	52,258	125,152	45,704	
3,345,625	3,309,291	2,434,162	2,437,859	4,098,518	3,545,725	3,039,524	2,530,483	9
1,428,764	1,290,373	661,801	378,809	1,742,272	1,380,589	776,419	396,990	
15,330	15,486	17,291	16,306	24,621	19,739	18,879	19,906	10
51,010	25,000	16,036	7,848	134,644	59,290	23,796	18,158	
1	3	48	–	6,930	13,957	1,720	65,103	11
22	31	360	–	102,020	172,856	24,841	510,153	
25	663	73	2,023	2,983	2,682	5,392	3,853	12
320	6,408	742	14,349	39,681	33,457	59,386	31,573	
30,619	7,057	3,167	19,831	32,179	9,513	3,341	37,897	13
255,487	51,092	15,890	49,239	270,228	69,347	17,654	105,519	
1,747,436	1,380,262	712,204	452,212	2,421,434	1,776,910	1,038,425	1,113,030	
5,043	61,051	1,489	2,100	919,767	1,158,835	186,936	659,941	14
1,892	20,187	536	622	319,169	429,280	66,122	161,998	
29,251	55,573	37,448	33,218	1,168,599	1,710,055	1,752,628	2,672,975	15
3,328	6,278	4,203	3,297	96,643	175,807	167,505	229,710	
881,320	504,131	381,584	383,096	1,405,745	955,933	646,096	621,243	16
260,973	267,322	209,511	182,946	260,973	267,343	209,721	187,371	17
599,370	581,025	363,557	165,754	599,370	581,090	364,173	174,707	
84,993,501	**66,894,165**	**34,068,408**	**22,342,515**	**158,757,272**	**133,009,145**	**83,714,772**	**68,798,683**	
783	198	2,445	568	488,800	545,986	351,261	373,599	18
1,151	980	8,571	3,235	238,437	272,117	210,036	118,810	
24,370	15,383	8,198	2,136	549,673	426,908	690,705	996,618	19
6,069	5,559	3,313	714	80,755	63,878	74,959	256,760	
126	633	40	93	163,764	184,584	163,158	105,173	20
35,538	19,917	26,795	12,533	701,806	842,588	763,679	729,445	
34,999	20,706	9,034	4,876	49,583	31,072	15,974	7,891	21
7,463	14,487	7,442	2,847	124,610	153,280	96,416	54,351	22
7,039,910	5,088,598	2,687,651	1,190,005	7,840,927	6,272,016	3,557,823	5,121,034	23
2,530,420	1,317,004	291,815	186,803	2,796,987	1,576,342	424,492	543,631	
2,625,865	1,434,381	405,086	253,866	3,256,693	2,025,655	872,582	713,499	
49,839	4,166	4,152	881	245,231	228,809	219,744	212,061	24
250,529	224,613	110,921	85,572	286,639	264,771	133,402	102,173	25
1,401,590	1,216,533	403,456	214,474	1,800,885	1,632,278	602,841	331,481	
53,904	84,634	80,987	107,153	128,834	136,178	138,750	184,411	26
573,152	965,295	920,430	924,389	1,317,290	1,502,421	1,502,839	1,499,366	
1,662	4,438	578	8	132,364	101,894	66,937	95,433	27
10,755	12,568	4,404	2,543	561,327	653,514	614,848	545,279	28
462	99	76	24	124,457	119,234	86,883	40,966	29
367	186	115	35	149,513	126,903	107,468	36,461	
604	593	1,234	2,614	206,091	216,376	136,253	27,383	30
765	651	668	1,348	464,794	826,425	866,591	766,402	31
4,930,498	**3,961,130**	**2,068,531**	**1,743,794**	**9,678,019**	**9,066,226**	**6,504,182**	**5,512,130**	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1929.	1930.	1931.	1932.
	IV. Wood, Wood Products and Paper.				
	Wood, Unmanufactured—				
	Logs and Round Timber—				
1	Logs, cedar.....M ft.	–	–	–	–
	$	–	–	–	–
2	Logs, other.....M ft.	2,688	1,878	4,475	4,427
	$	110,102	84,994	179,706	164,649
3	Poles, telegraph.....No.	–	–	–	–
	$	–	–	–	–
4	Railway ties.....No.	405.591	460,273	535,250	90.050
	$	282,015	340,127	353,183	49,324
	Totals, Logs and Round Timber[1]... $	392,317	425,328	532,909	214,473
	Sawmill and Planing-mill Products—				
	Planks and Boards—				
5	Birch.....M ft.	39,573	39,302	31,739	28,709
	$	1,465,342	1,343,322	1,056,037	823,552
6	Cedar.....M ft.	98	252	276	91
	$	4,691	19,714	15,743	3,403
7	Douglas fir.....M ft.	28,371	36,387	54,533	51,183
	$	678,140	862,303	1,103,998	856,241
8	Hemlock.....M ft.	710	3,002	1,264	305
	$	18,147	59,190	27,299	7,511
9	Pine.....M ft.	29,906	25,890	21,229	17,244
	$	1,989,823	1,568,965	1,297,968	1,020,390
10	Spruce.....M ft.	86,702	80,115	51,369	16,553
	$	2,247,799	2,117,119	1,349,596	375,691
	Totals, Planks and Boards[1].....M ft.	190,862	187,771	163,995	117,051
	$	6,676,663	6,179,125	5,122,810	3,252,621
	Timber, Square—				
11	Douglas fir.....M ft.	15,086	12,474	13,894	18,599
	$	307,971	284,304	270,610	289,014
12	Other.....M ft.	2,808	3,293	2,543	1,869
	$	262,707	302,701	216,657	134,809
13	Laths.....M	–	113	2	–
	$	–	452	8	–
14	Pickets.....M	–	–	–	495
	$	–	–	–	11,200
15	Shingles.....M	1,928	273	754	570
	$	6,081	1,159	2,260	1,171
16	Shooks.....$	41,570	89,177	120,669	137,209
	Totals, Saw- and Planing-mill Products[1] $	7,469,988	7,177,903	5,895,093	3,981,715
17	Christmas trees.....$	–	–	–	–
18	Pulpwood.....cord	–	–	–	–
	$	–	–	–	–
19	Spoolwood.....$	640,573	688,359	498,177	460,366
	Totals, Wood, Unmanufactured[1].... $	8,501,878	8,292,480	6,933,294	4,673,692
	Wood, Manufactured—				
20	Cooperage.....$	–	67	308	5
	Wood-pulp—				
21	Sulphate (kraft).....cwt.	–	–	–	–
	$	–	–	–	–
22	Sulphite, bleached.....cwt.	138,932	160,064	115,353	238,953
	$	609,899	688,004	463,716	782,777
23	Sulphite, unbleached.....cwt.	53,095	36,917	41,339	17,173
	$	126,458	81,227	70,869	25,287
24	Mechanical.....cwt.	728,304	424,873	408,660	434,666
	$	1,048,696	638,639	623,638	616,095
25	Screenings.....cwt.	–	–	–	–
	$	–	–	–	–
	Totals, Wood-pulp[1].....cwt.	920,331	621,854	574,773	690,792
	$	1,785,053	1,407,870	1,199,353	1,424,159
26	Furniture.....$	61,440	59,447	6,117	2,603
27	Match splints.....$	328,289	429,540	402,463	446,612
	Totals, Wood, Manufactured[1]....... $	2,695,827	2,427,450	2,021,321	2,188,388
	Totals, Wood and Wood Products[1].. $	11,197,705	10,719,930	8,954,615	6,862,080

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
30,908	35,544	21,962	19,415	156,211	81,747	46,338	70,851	1
482,954	524,081	227,724	158,574	2,030,869	1,127,783	486,395	678,914	
119,288	135,795	129,534	126,020	172,335	182,876	191,085	191,368	2
1,871,128	1,955,029	1,584,215	1,293,171	2,617,938	2,550,134	2,320,773	2,015,353	
855,221	942,008	862,246	329,607	855,372	944,606	865,251	331,006	3
3,443,283	3,907,649	3,601,464	1,236,112	3,444,631	3,917,536	3,610,531	1,242,273	
663,294	782,764	535,207	467,069	1,110,557	1,447,754	1,355,016	616,627	4
586,590	664,360	494,005	370,360	909,159	1,104,835	987,351	447,763	
6,557,048	7,337,085	6,128,426	3,179,176	9,344,088	9,115,082	7,719,251	4,555,042	
48,375	50,512	25,404	19,735	88,503	90,309	58,221	48,812	5
2,598,934	2,740,302	1,241,235	672,664	4,097,119	4,120,462	2,348,618	1,517,803	
43,460	45,915	33,694	22,214	44,760	46,974	34,532	22,837	6
1,840,857	1,847,315	1,223,545	710,375	1,893,753	1,904,873	1,262,949	729,814	
317,664	402,912	336,898	194,874	477,047	594,463	518,414	373,391	7
5,906,455	7,686,430	5,111,138	2,441,227	9,517,201	12,051,549	8,527,885	5,066,564	
102,441	129,998	67,637	12,245	132,975	148,868	86,790	56,604	8
1,764,935	2,100,116	837,808	141,576	2,440,246	2,447,164	1,160,147	713,705	
259,029	267,846	154,003	97,575	303,887	305,558	185,419	121,990	9
8,659,259	9,046,621	4,991,398	2,716,122	11,200,589	11,089,220	6,668,330	3,981,421	
526,455	497,717	344,905	242,447	623,087	592,740	409,337	269,362	10
14,617,055	13,827,106	9,056,616	5,559,872	17,201,126	16,411,999	10,839,240	6,236,644	
1,317,167	1,419,337	975,219	597,712	1,696,110	1,807,138	1,309,483	905,679	
36,378,168	38,399,785	22,935,928	12,544,921	47,663,849	49,446,887	31,598,202	18,766,452	
8,659	15,498	10,086	5,166	177,365	196,036	115,727	140,600	11
172,125	300,419	181,966	71,815	3,500,489	3,859,334	1,976,056	1,994,524	
1,184	2,311	1,141	587	6,008	5,889	5,141	2,520	12
38,706	64,489	37,878	18,452	353,426	375,975	277,642	155,653	
1,219,996	699,021	410,019	417,946	1,224,876	707,855	414,973	420,434	13
5,999,341	3,059,056	1,252,021	1,089,689	6,024,035	3,095,417	1,269,274	1,095,666	
41,001	45,166	34,475	29,045	41,213	45,411	34,661	29,674	14
385,070	399,913	315,737	226,529	389,598	404,862	319,215	240,029	
2,005,589	1,668,858	1,143,477	1,024,764	2,043,137	1,696,433	1,161,760	1,038,486	15
7,663,419	6,599,361	3,429,148	2,358,671	7,793,271	6,704,494	3,489,164	2,398,489	
14,508	13,729	8,852	8,250	610,580	856,986	554,477	436,175	16
50,778,922	48,983,499	28,235,244	16,352,627	66,712,335	65,283,253	39,761,734	25,295,003	
-	-	303,396	325,075	-	-	303,396	325,075	17
1,406,583	1,345,692	1,164,555	832,924	1,406,583	1,345,692	1,164,555	832,924	18
14,187,100	13,860,209	12,040,484	8,196,144	14,187,100	13,860,209	12,040,484	8,196,144	
2,390	9,628	23,141	14,256	642,963	697,987	521,318	474,622	19
72,312,271	70,947,960	47,119,304	28,427,487	91,675,675	89,717,326	60,744,984	39,226,465	
58,422	14,318	8,877	14,758	282,171	167,015	134,849	142,333	20
3,056,989	2,506,849	1,459,542	897,306	3,103,669	2,582,898	1,482,008	930,966	21
9,054,489	7,233,335	4,569,840	2,950,755	9,181,924	7,442,299	4,627,136	3,020,976	
3,764,479	4,064,853	3,716,079	3,992,560	5,064,582	5,270,202	4,634,136	5,308,838	22
14,263,297	14,968,712	12,574,542	11,572,380	19,334,364	19,871,813	16,122,124	15,898,585	
3,389,739	3,491,476	2,583,991	1,580,955	4,097,438	4,150,839	3,345,575	2,341,810	23
8,525,946	8,731,699	6,370,115	3,337,995	10,223,379	10,242,265	7,997,022	4,565,281	
3,334,694	3,944,792	3,463,432	2,448,590	4,062,998	4,495,687	3,872,092	2,883,256	24
4,492,547	5,665,837	4,917,335	3,242,378	5,541,243	6,482,354	5,540,973	3,858,473	
615,875	761,513	390,299	205,534	621,478	762,328	401,659	232,145	25
605,316	665,412	332,773	155,862	614,807	666,227	345,061	182,817	
14,161,776	14,769,483	11,706,377	9,190,493	16,950,165	17,261,954	13,862,122	11,762,563	
36,941,595	37,264,995	29,018,865	21,418,020	44,895,717	44,704,958	35,061,689	27,684,782	
52,444	40,095	30,292	28,891	381,734	342,428	270,252	154,239	26
43	-	-	-	392,632	500,240	494,157	526,891	27
37,487,667	37,684,939	29,129,824	21,501,729	47,166,122	46,874,140	36,624,477	29,028,173	
109,799,938	108,632,899	76,249,128	49,929,216	138,841,797	136,591,466	97,369,461	68,254,638	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	IV. Wood, Wood Products and Paper—con.					
	Paper, n.o.p.—					
1	Paper board	$	696,962	803,377	779,750	936,242
2	Book paper	cwt.	3,922	3,626	4,416	4,632
		$	44,740	45,287	48,195	39,124
3	Newsprint	cwt.	3,136,427	3,370,066	2,422,496	2,143,336
		$	9,711,867	9,265,221	6,956,655	5,385,872
4	Wrapping paper	cwt.	61,476	57,129	43,089	36,956
		$	310,446	291,741	218,575	182,887
5	Bond and writing paper	cwt.	9	20	363	281
		$	225	495	3,170	2,200
6	Wall paper	roll	642,713	391,090	258,149	473,126
		$	108,990	69,241	50,096	72,207
7	Roofing paper	$	8,874	–	28,090	5,057
8	Waste paper	cwt.	–	–	–	–
		$	–	–	–	–
	Totals, Paper, n.o.p.[1]	$	10,964,961	10,544,613	8,218,016	6,747,908
	Books and Printed Matter—					
9	Books	$	29,788	20,497	23,880	23,873
10	Newspapers, etc	$	156,550	163,635	152,901	100,703
	Totals, Wood, Wood Products and Paper[1]	$	**22,350,947**	**21,450,183**	**17,350,424**	**13,734,973**
	V. Iron and Its Products.					
	Pigs, Ingots, Blooms and Billets—					
11	Ferro-manganese and ferro-silicon	ton	–	–	–	22
		$	–	–	–	1,532
	Totals, Pigs, Ingots, Blooms and Billets[1]	ton	–	–	–	22
		$	–	–	–	1,532
12	Scrap iron	ton	335	1,213	710	48
		$	7,994	16,001	12,390	890
13	Castings	$	25,185	20,825	194	35
	Rolling-mill Products—					
14	Bars and rods	ton	116	56	36	–
		$	11,889	6,785	4,373	–
15	Rails	ton	–	–	–	–
		$	–	–	–	–
16	Structural steel	ton	–	–	–	24
		$	–	–	–	2,640
	Totals, Rolling-mill Products[1]	$	11,889	6,785	4,373	3,259
17	Pipe and tubing	$	79,610	171,306	138,407	54,950
18	Wire	$	160,814	181,136	107,719	24,172
19	Engines and boilers	$	5,871	2,483	4,320	339
	Farm Implements and Machinery—					
20	Cream separators	$	4,015	–	1,932	385
21	Milking machines	$	–	–	–	–
22	Harvesters	No.	189	396	280	369
		$	31,489	65,306	49,198	64,570
23	Hay rakes	No.	–	60	27	24
		$	–	2,192	990	762
24	Mowers	No.	925	1,056	191	363
		$	60,268	66,158	10,876	17,989
25	Reaper-threshers	No.	1	1	1	–
		$	1,094	1,283	1,341	–
26	Cultivators	No.	65	12	47	31
		$	3,901	1,157	3,488	2,479
27	Drills	No.	109	266	147	6
		$	10,733	26,336	15,982	1,169
28	Harrows	$	23,525	21,648	5,135	8,061
29	Ploughs	$	33,754	22,412	15,923	21,973
30	Threshing machines	$	1,460	1,516	–	450
31	Spades and shovels	$	3	14	613	10
32	Parts	$	199,009	185,641	149,964	130,880
	Totals, Farm Implements and Machinery[1]	$	448,376	459,143	332,893	315,136

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
1,247,759	1,335,391	888,086	474,531	2,311,423	2,506,496	2,002,946	1,751,707	1
57	2	139	958	80,384	62,028	34,237	24,555	2
1,370	20	2,061	6,140	659,316	547,040	310,789	196,725	
39,202,329	43,053,808	38,855,192	34,377,933	45,264,586	49,800,821	44,848,479	39,942,149	3
123,097,724	126,288,591	110,783,516	89,389,666	142,343,064	145,610,519	127,352,706	103,003,352	
8,485	9,213	13,082	13,133	331,518	302,384	282,395	244,417	4
16,220	18,198	22,039	22,942	1,814,166	1,655,568	1,416,482	1,064,923	
83	272	199	224	4,419	3,403	2,687	863	5
3,300	6,673	2,997	3,427	41,226	33,255	23,203	9,047	
172,204	137,195	163,736	129,943	2,706,413	2,716,519	1,665,046	1,316,297	6
35,994	31,469	38,622	23,177	365,696	399,516	250,212	180,607	
434	2,498	58	1,626	99,390	92,638	109,350	66,573	7
380,494	383,631	285,966	213,077	380,977	384,446	286,220	213,177	8
345,003	292,261	180,468	123,421	345,646	292,996	180,785	123,536	
124,898,461	128,081,602	111,973,779	90,097,205	148,394,868	151,509,623	132,038,737	106,750,055	
114,732	131,107	119,404	102,843	174,141	188,052	166,834	162,746	9
848,538	819,289	603,716	340,641	1,200,694	1,264,276	1,023,369	566,574	10
235,665,010	**237,669,413**	**188,949,408**	**140,473,352**	**288,621,745**	**289,566,675**	**230,604,474**	**175,740,269**	
53,592	66,891	31,900	18,811	54,143	66,995	32,166	19,166	11
3,792,142	4,534,454	1,976,892	999,583	3,840,780	4,543,649	1,994,536	1,029,797	
54,602	75,183	32,247	21,982	56,311	76,531	34,061	22,337	
3,809,298	4,687,073	1,983,646	1,055,516	3,884,106	4,727,137	2,039,983	1,085,730	
85,068	86,326	30,619	22,752	101,942	122,832	36,031	24,584	12
911,465	948,756	246,985	130,851	1,120,029	1,424,071	311,689	148,029	
43,315	240,141	62,297	30,241	90,839	275,767	83,266	37,323	13
2,377	1,638	779	288	24,743	17,522	5,903	749	14
114,345	76,640	34,560	11,918	847,248	663,568	234,551	34,190	
3,822	2,447	9,255	200	3,879	19,620	22,815	9,333	15
135,561	63,489	201,556	6,053	137,653	658,724	613,729	244,876	
46	45	30	–	463	2,490	2,346	405	16
4,606	400	1,070	–	57,165	347,158	291,784	42,906	
257,913	143,902	238,662	19,280	1,057,119	1,681,814	1,148,608	331,812	
745,223	419,839	625,925	415,686	2,222,432	2,202,769	1,652,280	1,068,481	17
2,344	7,292	6,957	3,448	951,750	909,540	531,367	122,447	18
31,691	11,659	15,732	61,114	235,608	397,022	160,125	106,632	19
11,620	9,416	8,150	3,402	51,991	37,339	30,792	5,660	20
382,434	633,226	268,012	88,781	392,597	633,226	269,637	90,168	21
367	866	472	79	11,510	12,098	3,787	1,675	22
60,454	154,745	96,177	38,917	1,982,689	2,230,336	682,303	323,426	
668	616	351	173	3,460	3,976	1,748	465	23
19,740	18,475	10,336	5,910	128,854	139,369	61,064	13,783	
1,008	1,328	662	182	10,580	13,448	6,318	2,218	24
53,057	69,895	34,423	9,991	625,168	823,499	380,842	115,662	
1,029	571	22	132	2,472	2,535	367	165	25
1,028,141	523,777	33,429	122,716	2,471,678	2,702,355	471,144	163,381	
5,540	1,004	558	638	14,335	17,144	8,971	1,853	26
475,418	63,483	21,163	46,533	799,887	600,819	450,521	134,357	
1,255	1,893	885	179	7,000	5,586	1,460	612	27
176,321	242,354	117,578	21,099	1,176,517	898,412	207,291	87,474	
298,505	212,014	49,245	14,383	522,497	476,584	142,230	34,342	28
503,057	888,546	796,942	93,655	3,272,043	4,798,183	1,564,462	303,843	29
126,884	316,440	193,605	169,191	326,114	577,953	401,873	236,015	30
2,177	900	4	–	295,128	194,949	135,894	86,522	31
1,143,349	828,877	291,490	133,665	3,064,433	3,117,364	1,755,694	655,261	32
4,367,408	4,118,842	2,030,436	794,012	15,870,918	18,396,688	7,188,078	2,484,965	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	V. Iron and Its Products—concluded.					
	Hardware and Cutlery—					
1	Razors and razor blades	$	3,100	66,375	52,723	100
2	Nails, wire	cwt.	998	120	82	68
		$	3,398	325	877	448
3	Nails, other	cwt.	394	509	180	193
		$	4,446	6,667	2,752	1,850
4	Needles and pins	$	531,084	400,716	316,600	446,201
5	Skates	pair	1,358	11,357	2,474	237
		$	2,093	18,301	5,709	193
	Totals, Hardware and Cutlery[1]	$	677,520	606,773	468,485	513,112
	Machinery—					
6	Electric vacuum cleaners	No.	26,653	34,091	42,243	49,966
		$	1,127,075	1,426,884	1,706,818	1,827,241
7	Sewing machines	$	85	135	120	343
8	Adding machines	No.	1,288	2,089	592	513
		$	102,909	174,602	51,272	38,616
9	Typewriters	No.	3	6	416	1,346
		$	265	325	38,786	95,462
	Totals, Machinery[1]	$	1,378,908	1,887,570	2,071,926	2,328,594
10	Tools, hand or machine	$	29,469	32,623	20,518	28,715
	Vehicles—					
	Automobiles, freight—					
11	One ton or less	No.	–	–	–	–
		$	–	–	–	–
12	Over one ton	No.	2	–	1	–
		$	2,280	–	421	–
	Automobiles, passenger—					
13	$500 or less	No.	2,485	2,412	259	104
		$	642,060	734,445	106,354	48,572
14	$500 to $1,000	No.	4,794	1,741	651	136
		$	3,317,145	1,220,686	408,052	88,449
15	Over $1,000	No.	1,278	840	6	3
		$	1,504,237	1,045,899	12,320	5,155
	Totals, Automobiles	No.	8,559	4,993	917	243
		$	5,465,722	3,001,030	527,147	142,176
16	Automobile parts	$	120,551	58,330	76,028	20,980
17	Railway cars and parts	$	–	365	–	–
18	Tractors and parts	$	–	–	–	–
	Totals, Vehicles[1]	$	5,587,624	3,061,383	603,881	163,866
19	Chains	$	40,096	27,657	28,092	28,940
20	Stoves	$	25,981	4,303	15,001	17,117
	Totals, Iron and Its Products[1]	$	**8,721,020**	**6,848,000**	**4,073,233**	**3,798,363**
	VI. Non-Ferrous Metals.					
	Aluminium—					
21	Scrap	cwt.	460	3,465	4,237	474
		$	7,246	56,519	58,219	5,771
22	Bars, blocks, etc	cwt.	74,698	122,289	63,909	107,076
		$	1,420,944	2,340,294	1,319,300	1,682,428
23	Manufactures	$	47,275	180,196	175,248	16,587
	Brass—					
24	Old and scrap	cwt.	3,575	2,870	2,402	621
		$	38,531	30,105	24,666	3,352
25	Valves	$	165,673	185,106	132,443	104,866
	Copper—					
26	Fine, in ore, matte, regulus	cwt.	214,321	71,041	20,504	147,339
		$	1,603,291	667,973	205,049	1,472,397
27	Blister	cwt.	–	–	–	–
		$	–	–	–	–
28	Old and scrap	cwt.	1,716	348	3,135	482
		$	18,478	4,175	28,165	2,850
29	Bars	cwt.	32	67	2,244	205,898
		$	1,380	2,687	26,339	1,575,756
30	Wire, insulated	$	17	150	–	–
	Totals, Copper[1]	$	1,623,376	675,117	259,587	3,051,003

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
–	–	4,860	30	633,568	537,362	525,371	17,227	1
2,782	2,559	701	320	69,284	54,787	31,552	13,963	2
9,552	8,714	2,583	1,197	245,441	188,406	115,623	53,229	
92	433	567	160	18,243	27,738	19,225	6,634	3
588	4,673	5,421	1,210	124,672	162,629	110,776	49,590	
471	778	897	60	612,077	502,164	382,776	502,380	4
94,235	97,953	149,190	159,432	103,155	123,399	163,555	168,468	5
95,404	88,206	126,004	102,985	111,271	132,126	150,921	116,664	
110,483	105,909	143,438	108,211	1,969,652	1,743,096	1,482,633	851,747	
5	23	9	4	39,556	50,374	52,557	52,989	6
155	685	7,279	674	1,697,642	2,067,328	2,099,333	1,925,130	
4,144	3,587	3,595	2,618	4,333,533	3,211,969	1,851,210	692,447	7
8	134	3	4	4,056	4,003	1,423	761	8
3,217	13,990	440	305	408,289	402,179	143,405	60,230	
31	32	87	49	1,089	1,234	1,433	1,531	9
1,856	1,938	3,226	1,706	54,948	68,614	91,260	103,768	
272,304	377,729	350,532	135,987	7,337,075	7,154,706	5,542,753	3,675,623	
29,090	51,982	10,317	13,204	267,358	284,800	161,091	107,765	10
3	12	18	14	22,165	21,447	3,961	1,660	11
585	1,200	3,085	2,015	7,871,430	8,465,601	1,305,592	545,964	
4	7	3	4	9,293	8,235	9,563	1,208	12
5,682	5,429	1,935	2,500	3,923,304	3,611,278	3,907,656	513,307	
131	249	317	343	54,561	36,220	17,999	4,889	13
30,612	54,688	73,168	86,066	19,219,420	13,856,685	6,818,126	1,902,392	
34	39	44	48	15,723	13,023	5,859	1,047	14
25,072	27,121	31,266	34,746	9,894,681	8,201,565	3,669,333	606,680	
7	17	5	10	1,824	936	145	35	15
10,400	25,281	12,000	17,493	2,150,898	1,172,516	178,533	48,908	
179	324	387	419	103,566	79,861	37,527	8,839	
72,351	113,719	121,454	142,820	43,059,733	35,307,645	15,879,240	3,617,251	
143,620	66,399	54,471	67,689	2,383,193	2,298,742	1,250,043	714,222	16
3,205	8,975	4,052	14,196	208,480	31,897	204,604	26,419	17
9,433	14,154	15,227	8,276	20,361	17,595	19,123	8,774	18
230,881	208,557	197,400	235,165	45,773,770	37,755,351	17,418,283	4,384,849	
12,316	3,776	206	508	164,144	168,758	112,809	91,597	19
38,582	72,256	33,491	9,895	129,573	152,692	108,162	78,512	20
11,157,421	**11,635,491**	**6,118,120**	**3,097,883**	**82,256,717**	**78,589,580**	**38,937,661**	**15,462,977**	
11,936	5,260	7,859	15,672	25,173	32,521	32,476	31,053	21
97,677	52,417	62,804	154,559	316,372	486,790	395,876	322,684	
218,924	291,454	101,114	16,887	438,099	771,919	322,919	194,559	22
4,323,108	4,887,230	1,639,342	248,571	8,608,247	13,828,010	5,791,984	3,161,608	
3,982	17,459	2,596	4,431	719,575	2,107,390	1,180,896	281,260	23
118,008	108,516	45,175	28,571	131,866	112,397	49,568	30,792	24
1,072,671	1,040,551	299,341	114,158	1,200,737	1,082,938	335,095	123,975	
4,725	1,677	453	351	272,300	288,663	196,191	148,823	25
641,585	749,481	593,447	334,691	855,906	820,846	629,971	502,237	26
6,332,888	8,096,900	5,256,490	2,402,259	7,936,179	8,769,586	5,629,512	4,076,854	
1,087,012	1,430,995	1,144,962	309,929	1,218,517	1,575,438	1,144,962	309,929	27
16,754,159	25,988,654	15,618,000	2,269,338	18,968,309	28,965,827	15,618,000	2,269,338	
66,473	119,655	40,811	34,015	73,573	122,693	54,313	53,494	28
734,466	1,648,737	339,852	165,180	825,672	1,692,472	463,548	283,959	
32	–	150,958	1,141,797	1,476	1,738	155,645	1,588,793	29
812	–	1,617,767	9,559,684	37,892	48,181	1,703,703	13,057,733	
565	1,461	1,421	238	253,163	136,709	58,401	76,479	30
23,829,452	35,739,195	22,834,707	14,398,526	28,046,684	39,628,652	23,483,044	19,802,750	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	VI. Non-Ferrous Metals—concluded.					
	Lead—					
1	In ore	cwt.	–	–	–	–
		$	–	–	–	–
2	Pig	cwt.	1,166,492	1,005,874	955,894	952,096
		$	4,746,588	4,341,596	2,853,605	1,869,509
	Nickel—					
3	In ore, etc	cwt.	273,254	128,493	310,795	194,348
		$	4,097,726	2,222,709	5,594,190	3,478,631
4	Nickel oxide	cwt.	2,066	2,445	1,055	1,472
		$	55,343	58,288	25,284	31,034
5	Fine	cwt.	28,318	7,346	7,723	2,935
		$	996,390	256,803	279,269	102,353
	Precious Metals—					
6	Gold-bearing quartz, gold dust, etc	$	21,631	–	–	937,367
7	Platinum, in ore, etc	oz.	1	4,428	19,840	16,546
		$	66	352,315	1,612,720	1,322,510
8	Silver in ore, concentrates, etc	oz.	–	–	–	–
		$	–	–	–	–
9	Silver bullion	oz.	478,214	168,588	–	142,456
		$	272,583	92,000	–	39,340
	Totals, Precious Metals[1]	$	339,891	489,988	1,650,446	2,330,012
	Zinc—					
10	In ore, etc	cwt.	–	–	–	–
		$	–	–	–	–
11	Spelter	cwt.	271,432	591,667	1,167,993	1,425,420
		$	1,410,394	2,732,922	3,434,377	3,209,143
12	Scrap, dross and ashes	cwt.	3,304	5,128	4,671	2,166
		$	13,528	18,378	11,471	3,149
	Electric Apparatus—					
13	Telegraph, telephone, radio apparatus	$	–	–	8,637	52,500
14	Heating and cooking devices, domestic	$	20,650	13,715	7,003	16,656
15	Spark plugs, magnetos, ignition apparatus	$	151,943	156,881	164,457	158,074
	Totals, Electric Apparatus[1]	$	298,649	274,496	229,958	271,711
16	Cobalt in ore	cwt.	634	580	144	208
		$	124,500	111,413	28,800	12,496
17	Cobalt, metallic	lb.	18,000	10,000	–	–
		$	41,000	25,000	–	–
	Totals, Non-Ferrous Metals[1]	$	**16,347,438**	**15,404,363**	**17,153,570**	**17,266,439**
	VII. Non-Metallic Minerals.					
18	Asbestos	ton	6,151	2,850	3,416	1,658
		$	504,555	323,417	249,869	126,706
19	Asbestos sand	ton	1,729	2,511	2,873	1,105
		$	34,904	60,225	69,797	24,647
20	Asbestos mfrs	$	10,233	82,882	124,252	59,631
21	Porcelain insulators	$	43,783	138,406	275,154	123,643
22	Other clay and products	$	223	1,182	2,164	872
23	Coal (incl. lignite)	ton	20,870	25,147	14,552	7,515
		$	148,338	187,912	99,943	48,954
	Coal Products—					
24	Coke	ton	–	–	–	–
		$	–	–	–	–
25	Tar	gal.	–	200	–	–
		$	–	144	–	–
26	Creosote oil	gal.	–	–	–	–
		$	–	–	–	–
27	Glass and glassware	$	96,702	47,996	117,914	95,801
28	Graphite	cwt.	146	128	155	500
		$	1,488	1,206	1,188	2,900
29	Mica splittings	cwt.	90	60	18	30
		$	3,005	3,510	1,230	1,650
30	Other mica	$	3,707	1,298	80	–
	Petroleum and Its Products—					
31	Petroleum, crude	gal.	7,242,258	8,526,834	7,204,979	1,424,780
		$	493,404	505,224	341,921	63,562
32	Kerosene, refined	gal.	–	–	–	–
		$	–	–	–	–
33	Gasolene and naphtha	gal.	–	1,292	–	–
		$	–	233	–	–
	Totals, Petroleum and Products[1]	$	499,460	518,009	353,414	77,163

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
145,583	200,751	212,667	44,027	146,622	201,127	219,624	44,217	1
872,914	1,190,932	1,086,089	176,064	879,148	1,192,732	1,100,376	176,964	
81	7,795	–	–	2,533,822	2,178,016	1,985,308	2,157,794	2
296	39,619	–	–	10,251,187	9,445,155	5,944,144	4,264,598	
132.588	164,290	76,387	40,768	405,842	293,657	423,835	286,580	3
1,988,208	2,576,761	1,377,768	732,606	6,085,934	4,819,695	7,725,696	5,231,277	
16,537	16,211	8,654	1,960	95,829	99,452	34,038	25,588	4
318,782	311,408	167,466	41,175	2,919,043	3,035,249	991,254	814,975	
470,471	610,010	322,414	205,143	573,151	672,066	361,420	231,623	5
11,181,954	14,943,549	8,126,991	5,119,742	14,875,515	17,180,031	9,529,425	6,063,148	
12,371,060	34,375,003	17,824,142	12,734,198	12,396,444	34,375,003	17,832,608	13,671,565	6
764	29	–	2	765	4,503	21,332	17,147	7
52,092	1,833	–	138	52,158	357,748	1,730,661	1,370,632	
6,378.786	7,244,184	7,953,061	3,752,121	6,517,822	7,390,017	7,994,815	3,752,121	8
3,596.903	3,805,786	3,085,514	1,055,738	3,671,422	3,878,703	3,098,337	1,055,738	
3,123,069	1,863,156	4,933,792	3,074,456	14,250,979	15,186,751	16,701,012	14,001,510	9
1,818.005	933.073	1,617,700	924,726	8,291,506	7,691,152	5,828,879	4,104,790	
18,234,110	39,513,806	22,831,444	14,927,591	24,853,191	46,746,390	28,832,299	20,446,311	
105	–	–	–	225,212	299,922	427,003	–	10
659	–	–	–	1,439,278	1,628,885	801,096	–	
–	–	–	–	1,275,076	1,355,517	1,745,176	2,307,298	11
–	–	–	–	6,652,637	6,488,679	5,122,994	5,254,112	
63,960	67,788	29,736	660	70,895	75,152	39,063	7,211	12
197,043	229,041	48,263	1,168	214,932	249,148	64,130	7,535	
–	–	43,460	17,084	–	–	204,369	186,826	13
9,502	4,997	2,215	625	652,605	765,648	725,543	504,687	14
1,501	724	841	431	459,158	460,129	297,362	255,726	15
94,816	107,229	96,567	40,780	2,400,838	2,521,045	2,009,389	1,297,098	
1	255	171	344	4,364	3,601	4,224	2,171	16
103	18,449	10,886	16,286	541,023	450,114	397,158	126,006	
243,548	257,800	27,000	55,510	261,548	267,800	27,000	55,510	17
451,968	491,889	45.406	68,746	492,968	516,889	45,406	68,746	
63,221,555	**101,728,976**	**58,835,683**	**36,176,490**	**112,778,194**	**154,319,429**	**95,652,063**	**69,072,888**	
85,477	85,247	67,389	37,415	134,062	136,333	100,223	62,050	18
5,401,953	5,588,201	3,531,310	1,772,076	9,090,392	9,560,889	5,921,357	3,437,088	
126.196	141,733	110,357	79,466	134,807	150,164	119,318	85,099	19
1,977,836	2,309,631	1,594,577	1,072,423	2,176,796	2,513,176	1,798,617	1,191,029	
26,015	16,317	12,549	10,331	76,043	137,833	178,252	105,420	20
161	692	711	407	147,279	249,457	463,211	246,781	21
135,175	84,478	78,591	68,971	148,589	103,164	95,597	85,590	22
463,281	370,012	185,665	165,232	879,170	755,846	562,434	357,289	23
2,077,199	1,720,688	882,258	732,878	4,523,985	3,998,692	2,976,426	1,872,200	
42,419	51,715	56,182	31,253	42,559	52,110	56,396	31,647	24
638,847	687,071	737,743	358,285	640,078	690,495	739,225	361,971	
375,009	335,532	292,549	425,836	3,256,681	4,582,309	2,751,619	2,279,254	25
28,110	26,359	22,393	31,138	246,081	177,885	122,087	103,913	
1,128,052	1,016,432	1,069,359	491,600	1,128,152	1,016,432	1,069,469	491,600	26
183,850	158,837	163,818	82,716	183,926	158,837	163,868	82,716	
11,473	20,712	9,311	6,320	157,227	104,440	163,686	170,815	27
18,932	43,959	30,142	18,412	19,100	44,087	30,298	18,914	28
43,995	121,496	75,333	43,473	45,686	122,702	76,561	46,395	
1,658	1,375	1,004	55	1,748	1,435	1,022	85	29
80,636	72,540	40,721	3,542	83,641	76,050	41,951	5,192	
89,415	112,642	43,910	31,768	93,556	115,521	44,760	32,049	30
16,274,142	14,767,901	12,445,991	8,238,592	24,065,888	25,078,076	21,790,367	11,452,470	31
765,683	651,149	487,622	282,728	1,308,623	1,281,294	962,768	462,009	
3,281	35,453	6,801	21,134	1,501,863	1,238,431	961,262	502,532	32
557	5,178	995	2,610	147,455	124,309	93,824	54,303	
1,098,976	2,343,013	2,535,309	1,694,610	4,035,744	5,071,177	6,429,080	5,349,030	33
224,416	468,439	405,109	267,206	724,385	950,130	1,063.811	853,800	
1,065,788	1,215,157	987,405	734,296	2,326,212	2,527,178	2,312,034	1,620,904	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	VII. Non-Metallic Minerals—concluded.					
	Stone and Its Products—					
1	Abrasives, artificial	cwt.	64,866	82,988	23,320	30,107
		$	239,495	289,380	93,819	100,528
2	Cement, Portland	cwt.	–	–	–	–
		$	–	–	–	–
3	Gypsum, crude	ton	–	–	–	–
		$	–	–	–	–
4	Lime	cwt.	–	–	–	–
		$	–	–	–	–
5	Feldspar	ton	6	20	–	–
		$	180	940	–	–
6	Sand and gravel	ton	–	–	–	–
		$	–	–	–	–
7	Talc	cwt.	14,915	18,608	13,901	21,052
		$	8,861	15,260	11,562	16,421
	Totals, Non-Metallic Minerals[1]	$	**1,771,253**	**1,952,156**	**1,546,819**	**894,408**
	VIII. Chemicals and Allied Products.					
8	Acid, sulphuric	cwt.	–	–	–	–
		$	–	–	–	–
9	Acids, other	cwt.	181,636	315,380	102,115	190,978
		$	2,155,707	2,841,150	890,328	1,302,102
10	Drugs, medicinal	$	295,935	335,224	243,238	262,902
11	Explosives	$	–	–	–	–
	Fertilizers—					
12	Ammonium sulphate	cwt.	–	–	–	–
		$	–	–	–	–
13	Cyanamid	cwt.	–	–	–	–
		$	–	–	–	–
	Totals, Fertilizers[1]	$	–	–	–	–
14	Paints, pigments and varnishes	$	196,044	124,604	125,050	127,154
15	Soap, toilet	lb.	3,864,470	4,729,321	3,562,969	4,784,007
		$	523,422	624,438	424,720	421,675
	Chemicals, Inorganic, n.o.p.—					
16	Arsenic, n.o.p	cwt.	–	–	–	–
		$	–	–	–	–
17	Acetate of lime	cwt.	2,283	–	–	–
		$	7,198	–	–	–
18	Soda and sodium compounds	cwt.	–	–	–	–
		$	–	–	–	–
19	Cobalt oxide and salts	lb.	111,022	86,000	154,500	154,000
		$	160,835	170,950	290,025	180,455
	Totals, Chemicals, Inorganic, n.o.p.[1]	$	173,421	176,589	292,128	188,404
	Totals, Chemicals and Allied Products[1].	$	**4,036,885**	**4,888,740**	**2,714,386**	**3,130,795**
	IX. Miscellaneous Commodities.					
20	Amusement and sporting goods	$	39,699	43,792	37,176	34,147
21	Brushes	$	59,291	45,168	11,739	16,675
22	Containers	$	4,098	6,777	12,818	7,320
23	Household and personal equipment	$	209,682	286,852	558,865	417,217
	Musical Instruments—					
24	Organs	No.	31	18	36	2
		$	3,297	2,352	3,812	265
25	Pianos	No.	16	10	5	10
		$	5,370	3,330	2,050	3,245
26	Other	$	25,742	8,164	7,576	3,303
	Scientific and Educational Equipment—					
27	Cameras	$	6,057	265	15	1,609
28	Films	$	2,049,518	2,006,728	2,006,254	2,070,656
29	Ships and vessels	$	2,593	2,214	2,643	5,442
30	Works of art, paintings	$	45,155	26,592	21,757	25,940
31	Contractors' outfits	$	–	5,102	–	–
32	Electrical energy	M k.w.h.	–	–	–	–
		$	–	–	–	–
33	Ice	$	–	–	–	–
34	Settlers' effects	$	427,508	474,126	363,654	424,417
	Totals, Miscellaneous Commodities[1]	$	**2,941,722**	**3,030,584**	**3,077,474**	**3,079,234**
	Totals, Exports, Canadian Produce[1]	$	**429,730,485**	**281,745,965**	**219,246,499**	**174,043,725**

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—concluded.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
1,237,428	1,449,204	1,022,291	605,345	1,327,797	1,542,895	1,047,807	638,556	1
3,088,318	3,454,453	2,475,674	1,394,218	3,446,155	3,775,924	2,577,730	1,504,870	
115,283	4,460	11,292	1,949	934,949	837,269	662,852	335,663	2
78,674	3,643	6,808	1,249	339,267	256,552	203,811	104,757	
868,044	855,931	704,939	597,474	868,044	855,931	704,939	597,474	3
1,240,439	1,048,130	848,778	736,539	1,240,439	1,048,130	848,778	736,539	
427,074	433,308	397,252	270,641	443,100	456,810	420,207	273,026	4
380,176	401,631	399,796	269,854	391,797	419,522	416,059	272,007	
28,547	28,382	11,173	11,920	28,613	28,481	11,223	11,945	5
227,990	228,631	86,965	95,473	229,970	231,941	88,365	96,053	
792,106	1,909,335	2,580,594	473,370	792,141	1,909,395	2,580,624	473,370	6
230,172	442,936	463,756	142,792	230,443	443,537	463,816	142,792	
202,374	201,571	141,399	137,320	225,457	223,591	157,910	159,074	7
124,400	118,528	76,938	67,556	138,390	135,456	90,079	84,548	
17,994,515	**18,662,256**	**13,255,258**	**8,233,323**	**27,401,790**	**28,545,096**	**21,107,780**	**13,456,701**	
245,307	152,259	11,802	20,510	245,339	152,319	11,828	20,566	8
138,927	81,495	6,449	19,316	139,128	81,580	6,553	19,500	
269,917	296,062	170,791	143,506	457,196	616,002	276,273	336,808	9
1,882,549	2,133,182	955,098	770,575	4,101,544	5,014,949	1,874,603	2,093,467	
12,063	17,683	16,772	9,097	660,667	779,625	560,485	471,086	10
500	405	3,496	304	216,557	235,187	238,709	53,666	11
83,492	135,222	88,062	98,784	318,040	448,339	182,863	218,658	12
151,094	209,539	134,311	146,354	637,149	783,890	298,811	313,889	
3,041,524	4,092,512	1,956,754	925,733	3,065,812	4,337,370	1,987,607	935,411	13
5,318,671	6,644,541	3,039,292	1,131,889	5,367,298	7,080,718	3,094,734	1,143,693	
5,535,837	6,966,540	3,463,289	1,752,252	6,078,038	7,990,313	3,698,774	1,946,185	
74,714	51,922	43,204	50,199	529,293	503,453	400,191	336,010	14
715	1,187	–	349	4,046,785	5,038,593	5,258,217	6,243,737	15
159	238	–	70	562,836	694,256	612,692	564,672	
34,965	26,908	22,723	32,102	34,965	26,908	22,723	32,102	16
134,073	106,070	83,750	117,975	134,073	106,070	83,750	117,975	
113,569	82,179	27,752	–	115,852	82,179	27,752	30	17
438,647	354,602	118,239	–	445,845	354,602	118,239	105	
433,971	614,873	435,163	487,167	747,333	922,132	680,593	760,030	18
2,022,607	2,327,562	1,309,251	1,105,845	3,919,560	4,208,518	2,870,365	2,841,609	
156,350	105,000	102,905	121,346	342,797	244,800	287,105	317,346	19
300,993	199,500	187,890	145,591	617,535	479,780	536,135	381,531	
3,031,182	3,116,177	1,768,773	1,380,911	6,037,777	5,908,405	4,302,406	3,859,592	
10,779,475	**12,535,510**	**6,361,691**	**4,123,489**	**19,438,064**	**22,468,462**	**12,825,852**	**10,535,038**	
55,636	46,208	41,485	23,890	128,203	131,503	122,569	79,843	20
563	1,117	101	78	120,060	111,920	67,463	56,513	21
199,524	218,969	163,991	97,955	572,701	616,213	505,800	361,204	22
100,224	99,831	118,339	66,599	676,313	820,831	1,001,055	719,744	23
17	17	13	13	270	232	177	76	24
217,131	174,821	115,216	80,140	242,276	197,969	154,684	97,197	
72	57	39	30	860	837	122	66	25
26,169	17,725	9,892	7,330	228,426	218,800	28,616	15,102	
10,995	12,215	10,093	17,086	297,188	229,512	118,957	62,651	26
5,905	3,424	1,944	1,157	128,040	8,266	4,103	13,777	27
1,330,140	1,928,730	1,348,721	992,713	4,265,322	4,790,619	4,250,536	4,011,672	28
108,781	83,957	155,859	141,239	209,187	901,269	562,719	512,678	29
81,504	88,846	96,669	66,562	138,455	121,672	129,504	95,105	30
388,154	364,659	416,842	195,717	421,969	379,046	442,319	201,451	31
1,442,932	1,499,087	1,697,763	1,041,041	1,442,993	1,499,123	1,697,814	1,041,094	32
3,935,899	4,025,233	4,449,711	2,706,661	3,938,182	4,028,154	4,453,280	2,710,410	
161,720	124,854	112,635	108,039	162,139	124,854	112,733	108,354	33
5,197,067	5,540,202	4,960,021	3,296,497	5,917,625	6,304,199	5,604,055	3,970,005	34
12,342,976	**13,336,314**	**12,359,090**	**7,960,570**	**18,263,813**	**20,057,938**	**18,115,846**	**13,367,251**	
499,612,145	**515,049,763**	**349,660,563**	**235,186,674**	**1,363,709,672**	**1,120,258,302**	**799,742,667**	**576,344,302**	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom. 1929.	1930.	1931.	1932.
	I. Agricultural and Vegetable Products. A. MAINLY FOOD.					
	Fruits—					
	Fresh—					
1	Apples	brl.	100	–	–	–
		$	914	–	–	–
2	Bananas	bunch	–	–	–	–
		$	–	–	–	–
3	Cranberries	brl.	–	–	–	–
		$	–	–	–	–
4	Grape fruit	lb.	–	700	–	–
		$	–	39	–	–
5	Grapes	lb.	246,317	240,605	138,040	231,547
		$	28,782	26,106	11,762	13,949
6	Lemons	box	4,317	10,544	2,872	9,227
		$	13,326	48,533	11,042	40,014
7	Melons	No.	325	–	–	–
		$	63	–	–	–
8	Oranges	box	8,015	58,603	83,437	46,137[2]
		$	38,191	211,038	373,700	66,984
9	Peaches	lb.	–	–	4,500	–
		$	–	–	356	–
10	Pears	lb.	7,000	–	11,880	–
		$	682	–	1,182	–
11	Pineapples	$	–	–	–	–
12	Plums	bush.	–	–	–	–
		$	–	–	–	–
13	Strawberries	lb.	–	–	–	–
		$	–	–	–	–
	Totals, Fresh Fruits[1]	$	83,910	289,123	398,765	121,139
	Dried—					
14	Currants	lb.	1,160	1,684	21,606	1,368
		$	192	226	2,290	193
15	Dates	lb.	5,486,205	7,432,110	8,460,711	8,817,560
		$	236,591	300,145	314,067	255,046
16	Figs	lb.	876,049	322,360	70,155	8,023
		$	53,765	19,778	3,425	344
17	Peaches	lb.	–	8,750	38,540	91,472
		$	–	864	3,974	4,989
18	Prunes and plums	lb.	–	–	1,953	–
		$	–	–	123	–
19	Raisins	lb.	310,863	236,671	46,045	337,758
		$	25,396	16,787	3,277	22,875
	Totals, Dried Fruits[1]	$	330,263	365,117	359,821	302,087
20	Canned	lb.	66,898	138,156	598,535	67,233
		$	5,190	8,369	26,025	3,557
21	Jellies and jams	lb.	1,061,771	1,256,632	965,973	558,157
		$	141,892	161,094	106,303	62,243
22	Fruit juices and syrups	gal.	8,364	19,457	10,175	9,822
		$	24,013	31,519	21,993	23,516
	Totals, All Fruits[1]	$	616,284	877,825	939,980	544,662
	Nuts—					
23	Coco-nuts	No.	–	–	–	–
		$	–	–	–	–
24	Coco-nut, desiccated	$	4,146	1,317	144	–
25	Almonds, not shelled	lb.	–	440	4,318	7,394
		$	–	50	692	687
26	Brazil nuts, not shelled	lb.	279,170	332,581	240,990	359,994
		$	41,950	34,243	30,929	28,321
27	Peanuts, green, shelled or not	lb.	–	–	38,394	7,469
		$	–	–	1,697	245
28	Walnuts, not shelled	lb.	1,630	934	4,214	24,482
		$	242	154	514	2,521
29	Almonds, shelled	lb.	115,521	114,073	112,139	60,654
		$	56,755	52,200	41,715	19,248
30	Walnuts, shelled	lb.	12,555	18,364	12,263	29,828
		$	4,135	6,471	3,434	8,102
	Totals, Nuts[1]	$	190,249	218,006	153,683	104,395

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[1] Totals include other items not specified. [2] Quantities are in cubic feet in 1932. [3] Quantities are in lb. in 1932.

Kingdom, United States and All Countries, fiscal years 1929-32.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
190,622	154,549	135,024	113,689	194,620	158,420	139,474	120,036	1
917,148	861,231	589,897	495,685	943,986	903,088	627,137	537,957	
3,531,015	1,188,351	768,270	614,896	3,589,693	3,923,944	3,889,713	3,960,197	2
5,204,262	2,055,691	1,256,787	936,182	5,246,109	3,554,402	2,475,270	2,114,627	
21,689	22,616	21,667	16,766	21,689	22,616	21,667	16,871	3
241,371	243,978	192,183	124,018	241,371	243,982	192,183	124,509	
19,945,982	24,015,866	26,243,901	34,302,697	20,528,581	25,898,332	28,348,217	38,110,494	4
883,007	1,133,036	1,085,416	950,738	911,099	1,224,229	1,186,437	1,081,236	
33,980,103	26,188,453	32,366,331	17,636,565	34,398,174	26,572,605	32,701,064	18,122,292	5
1,573,547	1,350,786	1,064,127	908,860	1,620,793	1,394,126	1,095,499	946,640	
283,517	234,591	259,030	268,393	406,600	344,759	389,302	387,215	6
1,330,500	1,193,351	1,073,112	1,019,439	1,835,883	1,644,398	1,533,406	1,419,260	
5,735,066	6,529,351	7,374,310	7,728,733	5,740,367	6,529,381	7,645,862	7,732,134	7
572,382	731,527	577,147	467,704	573,287	731,539	577,458	468,289	
2,256,797	2,708,465	2,080,218	4,463,740[2]	2,389,369	2,911,551	2,406,433	5,018,622[2]	8
9,893,629	8,680,870	8,281,741	5,709,149	10,326,874	9,368,082	9,492,922	6,459,707	
20,734,458	20,003,960	11,836,325	11,335,847	20,734,458	20,003,960	11,894,287	10,340,187	9
625,848	768,583	683,203	334,957	625,848	768,583	686,673	335,340	
27,399,706	19,188,122	23,333,224	12,783,639	27,416,131	19,199,747	23,422,654	12,839,442	10
1,019,863	1,039,351	1,035,349	463,994	1,020,907	1,040,148	1,039,198	469,336	
462,056	495,290	581,091	415,185	464,774	585,799	644,062	453,742	11
268,755	251,392	309,889	6,900,714[3]	268,755	251,392	310,198	6,919,030[3]	12
572,402	582,109	557,007	239,512	572,402	582,109	557,526	241,129	
8,787,468	8,552,251	3,712,179	4,720,813	8,787,468	8,552,251	3,712,179	4,725,570	13
1,029,277	1,024,854	589,791	586,431	1,029,277	1,024,854	589,791	586,834	
24,708,047	20,726,166	17,872,315	12,805,589	25,915,836	23,778,878	21,021,129	15,405,008	
17,396	168,263	28,352	1,796	6,122,795	4,493,344	4,653,223	5,505,404	14
2,234	12,766	1,579	173	773,965	499,495	449,254	495,900	
3,634,028	3,615,660	2,138,332	1,143,291	10,970,646	12,043,586	11,902,113	14,095,699	15
341,220	316,462	130,875	64,740	664,532	663,974	503,135	450,733	
1,227,507	1,094,671	930,470	1,017,229	4,989,470	4,586,269	2,905,568	3,815,781	16
116,861	105,357	63,501	60,288	382,606	360,310	191,703	209,478	
2,384,785	1,412,494	1,187,325	1,102,518	2,384,785	1,488,416	1,253,335	1,367,460	17
222,943	165,922	101,577	79,148	222,943	175,452	108,124	100,736	
18,957,063	15,267,619	16,656,477	16,020,566	18,962,384	15,270,972	16,670,146	16,034,658	18
1,201,600	1,328,724	906,786	716,829	1,203,085	1,329,732	908,385	717,525	
39,775,494	30,893,026	25,145,909	16,339,772	43,656,095	38,322,700	36,719,363	33,964,927	19
1,903,387	1,572,340	1,196,788	998,930	2,371,556	2,433,145	2,357,648	2,709,296	
4,126,960	3,764,748	2,591,559	2,101,980	5,999,345	5,808,878	4,780,108	4,930,373	
23,459,351	23,990,071	13,694,658	3,623,705	39,908,271	43,082,076	38,832,973	26,230,953	20
2,032,741	2,393,448	1,245,974	308,706	2,978,012	3,425,966	2,526,662	1,308,061	
244,117	203,377	150,329	53,452	1,877,195	2,365,507	1,218,337	629,545	21
52,908	37,326	25,901	10,087	330,019	392,195	155,429	76,790	
83,857	678,955	252,037	125,026	130,940	758,247	323,596	179,498	22
159,883	393,276	353,764	185,595	210,156	463,095	407,976	236,123	
31,165,554	27,392,739	22,166,887	15,504,556	35,876,473	34,277,882	29,498,549	22,476,232	
110,980	61,587	55,972	49,753	9,050,925	7,372,409	7,206,588	7,182,303	23
5,743	3,498	2,313	2,572	201,747	150,517	115,745	101,748	
495	872	337	222	162,955	200,805	138,816	55,239	24
39,228	55,010	22,226	1,283	1,106,981	863,032	931,556	1,017,088	25
9,379	8,691	4,244	266	148,199	123,099	97,900	72,944	
755,905	926,075	455,143	701,196	1,238,335	1,562,262	1,055,977	1,343,299	26
121,452	102,566	60,901	66,521	189,986	153,504	133,727	105,738	
1,645,706	1,817,363	2,539,163	4,090,355	8,152,410	7,170,068	25,323,421	28,967,735	27
166,845	155,559	181,610	243,383	481,834	354,051	971,216	956,161	
473,948	741,024	628,684	253,143	1,703,593	1,753,936	1,388,093	1,141,907	28
109,609	129,206	109,652	53,823	250,194	239,555	184,355	135,959	
65,085	23,694	7,813	14,438	2,029,952	2,213,777	1,732,343	1,726,851	29
37,009	13,255	4,361	4,597	733,946	756,242	441,131	373,530	
137,147	231,557	184,444	487,533	4,674,891	4,659,281	4,806,662	5,377,410	30
32,350	73,755	70,954	181,517	1,130,677	1,138,485	1,003,151	1,202,559	
1,603,718	1,512,154	923,111	906,100	5,175,287	5,095,109	3,998,144	3,646,143	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	I. Agricultural and Vegetable Products—con. A. Mainly Food—continued.					
	Vegetables—					
1	Cabbage	lb.	–	–	–	–
		$	–	16	–	–
2	Carrots	lb.	–	–	–	735,398
		$	–	–	–	18,668
3	Celery	lb.	–	–	–	–
		$	–	37	–	–
4	Cucumbers	lb.	–	–	–	–
		$	–	–	–	–
5	Lettuce	lb.	–	–	–	–
		$	–	–	–	–
6	Onions	lb.	–	–	–	946,473
		$	77,009	71,690	26,275	20,491
7	Potatoes (except sweet)	cwt.	–	–	13	–
		$	–	–	13	–
8	Tomatoes, fresh	lb.	–	–	–	–
		$	94	560	–	–
9	Canned	lb.	898	13,617	7,021	41,875
		$	165	1,660	664	5,540
10	Sauces and pickles	gal.	167,184	142,084	126,963	123,456
		$	268,929	256,496	222,984	205,424
	Totals, Vegetables[1]	$	350,369	332,791	267,069	258,438
	Grains and Farinaceous Products—					
	Grains—					
11	Beans	lb.	1,102,020	824,760	548,597	472,303
		$	60,326	55,071	36,942	26,025
12	Corn	bush.	–	54	127	108
		$	–	161	292	327
13	Oats	bush.	1,276	1,963	43	15
		$	1,731	2,186	34	26
14	Rice	cwt.	14,036	1,424	1,227	8,279
		$	44,153	5,772	4,388	21,576
	Milled Products—					
15	Corn meal	brl.	–	–	–	276
		$	–	–	–	1,151
16	Wheat flour	brl.	136	496	529	118
		$	1,234	6,471	4,744	754
	Prepared Foods and Bakery Products—					
17	Biscuits	lb.	1,558,495	1,624,113	1,856,790	1,555,076
		$	211,636	228,518	268,283	209,268
18	Cereal foods, prepared	$	22,954	16,122	17,244	13,434
19	Macaroni and vermicelli	lb.	522	794	792	978
		$	71	83	84	91
20	Malt	lb.	49,656	22,512	45,024	1,000
		$	3,152	1,223	1,957	63
21	Sago and tapioca	lb.	5,769	29,581	66,288	23,938
		$	352	1,633	2,083	689
	Totals, Grains and Farinaceous Products[1]	$	557,239	608,301	521,693	329,916
	Oils, Vegetable, for Food—					
22	Coco-nut oil, n.o.p	gal.	56,290	56,163	51,099	72,120
		$	61,503	61,972	50,833	62,333
23	Cotton-seed oil for canning fish	gal.	126,955	134,130	89,630	63,480
		$	110,505	119,577	67,031	38,670
24	Olive oil, n.o.p	gal.	1,354	1,282	5,355	4,364
		$	2,973	2,534	4,783	5,090
25	Peanut and soya-bean oil, n.o.p	gal.	71,164	77,457	118,480	76,586
		$	58,714	60,977	80,413	37,342
	Totals, Oils, Vegetable, for Food[1]	$	246,755	269,305	205,721	147,595
	Sugar and Its Products—					
26	Molasses, 56 degrees or less, imported under preferential tariff	gal.	–	–	–	–
		$	–	–	–	–
27	Sugar, not above No. 16, D.S	cwt.	–	4	–	–
		$	–	10	–	–
28	Sugar, above No. 16, D.S	cwt.	52	33	107	4,812
		$	580	375	710	14,094
29	Candy (incl. chocolate)	lb.	3,299,540	3,515,176	3,039,816	2,436,199
		$	633,525	633,820	501,468	376,145
	Totals, Sugar, etc.[1]	$	749,056	727,555	584,162	479,069

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
–	–	–	17,406,180	–	–	–	17,645,544	1
367,420	382,232	448,734	255,648	368,812	383,491	450,101	261,309	
–	–	–	10,794,095	–	–	–	11,566,648	2
–	–	–	246,213	–	–	–	265,808	
–	–	–	14,737,372	–	–	–	15,033,882	3
582,888	634,640	645,728	479,002	584,604	641,858	662,934	487,864	
–	–	–	3,690,765	–	–	–	3,700,547	4
–	–	–	201,255	–	–	–	201,870	
–	–	–	30,526,831	–	–	–	30,527,076	5
883,275	1,103,405	928,907	865,227	883,281	1,003,405	928,907	865,232	
–	–	–	8,726,730	–	–	–	17,724,226	6
275,472	310,445	207,261	206,118	760,375	649,301	435,317	393,603	
472,971	769,401	406,480	192,272	473,351	769,777	407,525	193,573	7
539,803	1,345,479	690,755	279,900	540,807	1,346,332	693,600	283,551	
–	–	–	29,534,294	–	–	–	43,300,666	8
1,457,989	1,650,338	1,399,813	1,321,432	1,900,054	1,955,100	1,899,838	2,006,030	
14,210,283	16,926,833	9,800,064	2,642,106	20,356,335	24,085,829	15,290,617	5,550,358	9
1,169,546	1,392,824	865,750	252,329	1,752,644	2,106,447	1,328,919	499,080	
152,179	175,720	253,552	129,591	474,163	454,566	582,774	441,686	10
247,211	287,985	265,503	126,942	604,396	628,529	601,937	420,925	
7,337,994	9,196,444	7,248,456	5,153,932	9,299,328	11,020,339	8,934,781	6,746,722	
4,395,840	1,808,460	1,353,261	865,423	19,669,680	13,584,300	8,536,577	2,199,798	11
322,729	187,519	114,015	57,896	1,128,112	807,859	392,471	115,564	
9,583,974	9,153,016	3,119,139	2,294,195	14,128,888	14,839,040	10,055,152	9,050,730	12
9,346,215	8,785,681	2,632,509	1,306,736	13,792,143	14,149,266	7,417,271	3,921,253	
3,035,480	3,723,985	1,349,202	1,577,465	3,036,756	3,725,948	1,349,245	1,577,480	13
1,544,595	1,873,679	597,284	393,027	1,546,326	1,875,865	597,318	393,053	
198,313	194,496	256,928	188,768	592,879	578,807	617,725	670,660	14
584,239	648,049	675,634	399,159	1,891,053	1,895,785	1,660,395	1,414,756	
46,749	50,156	35,517	28,414	46,749	50,156	35,517	28,690	15
234,892	239,538	159,830	93,958	234,892	239,538	159,830	95,109	
75,246	87,538	35,636	13,768	75,432	88,077	36,832	21,967	16
539,037	593,328	249,102	88,718	540,853	600,338	256,285	113,190	
1,987,128	1,787,481	1,133,695	690,315	3,724,962	3,569,592	3,221,384	2,295,688	17
262,432	232,667	158,530	88,452	505,687	492,769	475,408	325,084	
282,269	308,212	235,274	166,240	306,873	330,078	255,330	182,659	18
2,817,834	2,694,150	2,243,447	880,414	3,074,380	3,366,436	2,696,020	969,829	19
246,670	218,869	168,191	65,060	265,170	262,773	198,246	70,828	
40,881,816	25,951,335	11,703,885	2,338,359	41,195,472	26,139,077	12,078,909	2,642,884	20
1,276,278	682,769	276,885	57,708	1,293,830	692,544	295,226	71,755	
158,556	454,497	537,698	318,518	3,975,002	2,931,104	3,268,929	3,078,724	21
26,541	41,827	58,557	24,172	157,149	122,284	138,828	86,028	
16,390,339	16,695,799	6,272,049	3,406,723	23,737,007	25,082,671	13,339,358	7,585,738	
25,263	14,984	20,089	35,879	81,795	71,147	71,268	111,831	22
32,208	18,292	20,964	28,873	93,976	80,264	71,925	94,298	
119	221	172	9,169	127,074	134,351	89,802	72,649	23
145	240	175	5,111	110,650	119,817	67,206	43,781	
19,125	21,614	13,713	13,062	354,702	359,358	506,512	357,546	24
35,297	38,003	23,371	20,120	615,805	574,381	546,896	411,412	
2,548	5,488	9,014	23,828	126,408	135,551	197,753	189,244	25
2,853	6,455	5,997	9,426	120,290	117,501	129,581	89,375	
107,868	88,052	81,040	99,654	991,460	941,895	848,802	679,150	
–	–	–	–	4,507,093	4,586,160	5,193,745	4,632,067	26
–	–	–	–	1,692,874	1,536,137	1,733,201	1,431,406	
181,532	448	–	1	8,191,708	8,057,423	8,301,800	8,112,132	27
399,142	1,243	–	6	25,309,147	20,310,269	19,482,796	16,292,441	
57,536	49,902	55,897	33,086	829,760	1,413,904	1,022,076	1,605,457	28
227,302	175,638	241,518	141,477	2,874,108	3,950,400	2,376,209	3,550,562	
1,075,638	1,331,441	1,043,596	553,413	4,903,326	5,554,293	4,737,916	3,362,076	29
205,386	237,968	174,619	91,681	962,965	1,027,731	794,042	534,660	
1,555,894	1,430,810	1,001,567	562,410	31,757,316	27,987,156	25,151,230	22,398,080	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	I. Agricultural and Vegetable Products—con.					
	A. Mainly Food—concluded.					
	Cocoa, Coffee, Spices and Tea—					
	Cocoa—					
1	Cocoa beans, not roasted or ground	cwt.	15,736	19,963	21,123	16,616
		$	190,736	204,747	170,922	97,864
2	Cocoa butter	lb.	282,135	337,348	80,000	47,045
		$	97,787	103,281	17,866	9,774
3	Other	$	88,156	12,732	23,135	8,009
	Coffee and Chicory—					
4	Coffee, green	lb.	3,219,477	2,508,577	2,644,554	2,854,466
		$	830,481	620,318	524,470	478,073
5	Other coffee and chicory	$	28,969	34,444	21,383	20,298
	Spices—					
6	Mustard, ground	lb.	825,022	669,853	695,312	609,421
		$	441,494	316,360	366,241	336,258
7	Pepper, unground	lb.	591,658	556,854	294,966	394,730
		$	199,310	175,987	51,820	43,651
	Totals, Spices[1]	$	704,414	552,846	455,056	422,648
8	Tea	lb.	16,245,586	15,424,517	21,483,822	16,302,582
		$	5,282,578	4,819,006	5,890,642	3,283,730
9	Yeast	lb.	1,588	4,019	19,620	44,367
		$	416	688	2,735	5,989
10	Hops	lb.	198,482	226,684	549,898	128,948
		$	25,680	22,485	30,381	38,571
11	Liquorice paste	lb.	224	3,732	960	2,234
		$	60	441	136	311
12	Malt extract	lb.	397,685	574,415	671,331	502,936
		$	25,946	52,573	61,501	39,121
	Totals, Agricultural and Vegetable Products—A. Mainly Food[1]	$	**10,039,236**	**9,500,516**	**9,901,680**	**6,282,512**
	B. Other than Food.					
	Beverages, Alcoholic—					
13	Brewed (beer, etc.)	gal.	199,704	209,860	191,567	155,270
		$	405,522	436,923	393,935	318,085
14	Distilled spirits	pf. gal.	1,934,302	1,792,887	1,412,258	1,028,786
		$	39,733,695	36,823,582	28,915,742	21,160,223
	Wines—					
15	Non-sparkling	gal.	24,907	38,131	36,900	43,467
		$	166,470	237,621	203,089	216,024
16	Sparkling	$	9,140	10,036	2,655	217
	Totals, Beverages, Alcoholic	$	40,314,836	37,508,162	29,515,421	21,694,549
	Gums and Resins—					
17	Chicle gum, crude	lb.	1,450	–	–	–
		$	381	–	–	–
18	Lac, crude	cwt.	5	49	71	385
		$	234	2,677	1,570	7,823
19	Resin or rosin	cwt	52	387	390	138
		$	1,404	5,732	3,722	687
	Totals, Gums and Resins[1]	$	36,195	52,095	40,843	29,352
20	Oilcake and meal	cwt.	–	–	5,089	4,739
		$	15	–	9,655	7,187
	Oils, Vegetable, not Food—					
21	Chinawood	cwt.	–	4	5	8
		$	–	126	115	203
22	Coco-nut, palm, etc., for mfr. of soap	gal.	49,156	112,931	143,346	97,763
		$	42,367	85,859	77,484	47,421
23	Cotton-seed, crude, for refining	cwt.	47,686	138,616	45,960	79,334
		$	346,200	961,700	208,771	385,780
24	Essential (except peppermint, etc.)	lb.	82,051	94,330	99,320	66,561
		$	141,170	188,095	145,731	116,004
25	Peanut, for refining for food	cwt.	48,153	99,498	10,084	31,258
		$	423,810	747,436	58,429	169,113
26	Peanut, and soya oil for soap, etc	gal.	100,590	51,280	59,107	15,184
		$	82,641	36,010	41,928	7,493
	Totals, Oils, Vegetable, not Food[1]	$	1,209,234	2,359,787	680,857	891,067

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
31,664	26,152	21,543	19,548	158,013	189,097	163,631	147,997	1
420,521	312,008	234,021	154,389	1,942,164	1,971,066	1,401,582	861,151	
1,548,869	163,360	276,965	94,357	5,073,480	5,867,169	5,348,300	4,394,672	2
489,053	43,446	53,636	14,068	1,586,814	1,476,402	1,061,480	654,012	
110,466	121,284	92,704	101,914	273,524	203,957	178,449	182,188	3
42,658	97,690	312,517	187,477	25,126,041	28,660,517	31,501,596	32,436,632	4
10,758	17,337	42,561	22,472	5,856,317	5,924,635	4,365,637	3,674,413	
607,336	673,781	467,190	470,128	646,971	725,084	492,747	515,186	5
331,485	231,639	193,583	121,272	1,156,507	903,292	888,895	731,023	6
36,151	27,820	21,241	15,507	477,645	344,392	387,482	351,801	
73,555	32,645	54,991	15,192	1,619,894	1,851,840	1,789,229	1,877,605	7
20,715	10,033	10,885	2,299	541,013	588,892	331,603	217,861	
286,474	242,811	194,861	109,713	1,580,639	1,499,001	1,150,692	863,079	
53,277	84,294	44,898	41,165	39,425,956	38,102,295	53,464,341	42,765,703	8
25,387	38,267	16,412	13,190	11,752,521	10,694,379	13,048,877	7,125,314	
2,185,968	2,430,934	2,196,651	1,619,286	2,188,237	2,455,984	2,224,233	1,680,939	9
356,296	396,303	363,884	293,896	357,503	399,406	368,720	304,826	
1,625.829	1,442,831	1,019,731	212,504	2,399,294	2,802,861	2,746,277	1,039,434	10
445,441	307,249	201,166	48,916	682,493	580,162	408,710	197,223	
1,580,022	1,543,157	1,347,774	1,255,661	1,580,246	1,546,889	1,359,991	1,283,239	11
223,686	218,395	180,138	167,028	223,746	218,836	182,468	172,513	
3,466,700	3,857,135	3,159,127	1,924,286	3,865,045	4,431,746	3,832,309	2,428,651	12
278,533	299,718	256,226	183,539	304,492	352,345	318,490	226,212	
61,572,871	**59,170,374**	**39,971,929**	**27,345,751**	**132,264,858**	**128,688,803**	**104,963,726**	**78,462,028**	
519	5,949	2,536	52	242,100	259,003	230,995	195,664	13
1,004	5,624	1,932	103	495,531	541,961	482,357	388,319	
1,729	1,174	191	14	2,604,769	2,446,800	1,990,574	1,421,214	14
4,221	3,007	559	89	44,750,649	41,283,758	32,662,269	23,798,052	
33	27	33	223	990,569	1,138,633	971,200	831,349	15
334	183	262	353	1,977,598	2,145,446	1,763,207	1,445,391	
–	–	–	–	1,620,333	1,055,322	526,804	298,118	16
5,559	8,814	2,753	545	48,844,111	45,026,487	35,434,637	25,929,880	
810,436	835,391	897,488	645,859	1,229,885	1,420,817	1,254,463	813,226	17
344,101	347,916	357,543	235,535	552,407	655,824	531,056	316,918	
18,436	16,453	11,663	8,475	19,430	17,363	11,794	8,909	18
853,938	705,063	319,205	203,722	900,097	740,637	321,714	212,438	
303,214	343,394	276,884	245,872	304,921	344,937	277,532	247,495	19
1,078,178	1,189,375	761,492	540,561	1,097,223	1,208,210	767,688	544,874	
2,956,844	2,952,867	2,000,730	1,430,200	3,348,543	3,431,591	2,350,076	1,601,635	
151,834	246,583	111,250	104,099	162,851	277,081	156,569	134,829	20
337,785	486,012	182,027	100,429	359,973	548,642	249,108	138,621	
52,701	60,020	48,364	40,813	55,335	61,861	48,369	41,280	21
672,536	789,986	450,444	268,374	708,937	813,937	450,559	271,695	
3,137,831	2,624,432	2,601,095	2,620,087	3,241,587	2,874,972	3,080,061	3,073,477	22
2,295,071	1,957,686	1,737,096	1,258,288	2,384,627	2,143,817	2,015,972	1,475,540	
253,971	258,952	140,293	306,901	302,917	400,653	174,711	386,275	23
2,100,209	1,985,153	804,001	1,216,186	2,449,817	2,975,394	1,025,235	1,602,172	
247,230	303,869	278,189	238,863	508,899	560,044	563,825	477,663	24
373,771	496,088	483,516	330,880	842,490	1,021,053	875,451	664,380	
51,405	90,839	365,393	80,580	206,288	321,924	599,385	378,056	25
421,129	733,618	2,516,679	443,204	1,740,035	2,587,498	4,249,550	1,818,432	
743,866	793,859	524,535	120,828	941,072	874,599	902,379	848,675	26
511,089	486,733	348,562	55,513	652,323	541,394	596,343	331,335	
7,176,308	7,164,969	6,898,762	4,128,085	9,817,721	11,302,256	10,021,904	6,964,867	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	I. Agricultural and Vegetable Products —concluded.					
	B. OTHER THAN FOOD—concluded.					
1	Plants, trees, shrubs and vines	$	67,552	82,033	59,722	61,325
	Rubber—					
2	Raw (incl. balata)	lb.	420,326	9,251	21,486	5,054
		$	79,530	4,674	9,261	4,902
3	Recovered	cwt.	5	–	–	10
		$	6	–	–	71
4	Thread	lb.	20,200	32,203	26,555	81,053
		$	20,893	31,452	24,984	56,454
5	Pneumatic tire casings	No.	759	657	1,197	206
		$	3,531	7,626	13,088	2,929
6	Inner tubes, n.o.p.	No.	40	40	581	125
		$	316	119	615	120
	Totals, Rubber[1]	$	697,774	576,582	531,504	482,424
	Seeds—					
7	Clover	lb.	1,193,854	552,242	431,301	54,495
		$	209,378	96,074	65,707	10,501
8	Flax	bush.	179	–	156	230
		$	1,282	–	521	786
9	Timothy	lb.	–	–	12,320	–
		$	–	–	1,897	–
	Totals, Seeds[1]	$	360,348	342,666	245,146	152,426
	Tobacco—					
10	Unmanufactured	lb.	44,909	2,088	74,646	380
		$	55,630	1,654	37,282	816
11	Cut	lb.	124,321	114,046	99,263	85,634
		$	430,460	393,212	346,089	302,780
12	Other manufactured	$	292,155	316,890	274,794	212,997
	Totals, Tobacco	$	778,245	711,756	658,165	516,593
13	Broom corn	$	166	–	–	92
14	Hay	ton	–	–	–	–
		$	–	–	–	–
15	Starch, including corn and potato starch	lb.	201,863	146,596	108,937	119,475
		$	11,966	9,693	7,466	9,040
16	Tar, pine, crude	gal.	9,726	4,748	617	6,944
		$	1,608	893	414	2,021
17	Turpentine, spirits of	gal.	2,573	159	311	140
		$	1,527	261	321	173
	Totals, Agricultural and Vegetable Products—B. OTHER THAN FOOD[1]	$	**43,631,325**	**41,778,766**	**31,861,107**	**23,938,485**
	Totals, Agricultural and Vegetable Products	$	**53,670,561**	**51,279,282**	**41,762,787**	**30,220,997**
	II. Animals and Animal Products.					
	Animals, Living—					
18	For exhibition	$	1,400	7,000	660	240
19	For improvement of stock	$	242,486	208,579	211,882	71,761
	Totals, Animals, Living	$	294,963	261,172	236,592	92,261
20	Bone dust and ash, charred bone	cwt.	16,447	12,157	8,123	5,217
		$	54,733	24,346	20,859	9,561
21	Bone, ivory and shell products, n.o.p.	$	17,733	15,264	13,606	7,861
22	Feathers and quills	$	97,081	90,456	124,171	132,834
	Fishery Products, n.o.p.[2]—					
	Fresh—					
23	Halibut	lb.	–	–	–	–
		$	–	–	–	–
24	Oysters, shelled	gal.	–	–	–	–
		$	–	–	–	–
25	Oysters, other	$	–	–	–	–
26	Other fresh fish	$	2,995	1,074	2,245	1,277

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[1] Totals include other items not specified. [2] Not including turtles, shell products, seal skins, fish oils and ambergris.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
520,716	558,430	349,134	247,427	1,792,171	1,913,447	1,629,504	1,105,567	1
72,629,626	70,003,561	58,892,977	54,020,066	77,716,891	73,339,973	59,559,131	55,269,390	2
16,450,361	14,052,161	6,680,821	3,482,090	17,415,202	14,715,267	6,781,261	3,572,854	
178,593	170,868	133,343	91,797	178,598	170,868	133,343	91,807	3
1,249,054	1,148,065	661,485	426,100	1,249,060	1,148,065	661,485	426,171	
208,443	233,112	257,398	171,732	228,701	265,315	294,721	761,500	4
219,692	220,347	217,867	149,253	240,635	251,799	250,180	210,614	
20,146	19,808	41,394	36,618	20,908	21,082	42,613	36,853	5
234,602	274,554	321,489	236,462	238,170	285,343	334,890	239,645	
20,979	3,731	17,197	9,974	21,019	3,871	17,839	10,099	6
30,922	9,555	20,733	11,062	31,238	9,882	21,422	11,182	
21,332,253	18,586,040	9,797,939	5,565,781	23,090,983	20,025,316	10,564,737	6,271,708	
640,320	786,136	922,417	517,560	1,907,818	1,350,598	2,106,524	1,045,104	7
124,698	136,556	142,605	79,326	346,280	235,283	312,677	159,164	
20,290	50,046	1,896	818	399,964	1,558,993	525,295	383,720	8
33,945	94,992	6,159	954	715,358	3,190,199	1,183,542	353,273	
7,194,155	8,054,238	11,478,574	7,198,501	7,220,905	8,054,238	11,523,643	7,208,401	9
444,656	543,873	1,012,701	450,581	448,339	543,873	1,017,593	451,667	
1,011,205	1,323,192	1,629,371	835,532	2,242,651	5,061,255	3,395,757	1,643,165	
17,441,819	15,878,880	15,092,356	12,216,403	18,726,618	17,113,472	16,580,394	13,075,335	10
5,618,975	5,363,643	4,335,903	3,197,283	6,766,285	6,471,626	5,488,949	3,861,465	
168,756	177,180	144,661	95,210	317,921	318,400	270,661	201,450	11
192,519	202,452	167,239	117,417	636,091	609,376	523,115	427,383	
83,940	94,555	76,975	58,020	536,447	540,362	451,683	342,704	12
5,895,434	5,660,650	4,580,117	3,372,720	7,938,823	7,621,364	6,463,747	4,631,552	
425,035	462,254	339,784	202,467	427,636	462,254	339,784	202,467	13
5,380	4,502	4,573	1,444	5,380	4,502	4,753	1,444	14
83,192	61,715	66,335	18,479	83,192	61,715	66,335	18,479	
3,474,743	3,231,275	2,582,334	2,581,000	7,169,134	7,209,807	6,961,051	5,066,904	15
228,533	165,820	139,232	112,128	355,357	277,185	230,797	165,786	
420,161	344,329	237,490	176,863	466,634	438,921	279,632	228,408	16
111,360	91,660	49,708	34,382	122,409	113,984	60,827	47,226	
1,078,294	1,171,338	1,134,074	999,970	1,081,359	1,172,082	1,134,500	1,000,222	17
594,346	611,517	476,932	430,939	596,445	612,572	477,722	431,610	
42,094,581	**39,581,759**	**27,608,452**	**17,233,097**	**100,865,386**	**98,360,014**	**72,665,052**	**50,159,232**	
103,667,472	**98,752,133**	**67,580,381**	**44,578,848**	**233,130,244**	**227,048,817**	**177,628,778**	**128,621,260**	
1,845,326	1,558,629	1,264,656	1,273,519	1,846,726	1,565,629	1,272,316	1,273,759	18
493,891	496,545	298,891	113,344	738,119	737,405	525,882	195,594	19
2,800,331	2,490,328	1,966,665	1,580,564	3,104,353	2,802,754	2,251,160	1,722,489	
32,824	25,755	34,401	36,542	59,075	47,295	44,509	49,581	20
112,910	87,912	88,967	97,123	194,336	151,013	118,113	133,442	
227,902	231,276	168,908	127,566	303,232	307,328	262,447	164,149	21
138,297	113,367	71,558	118,214	316,696	266,145	249,630	298,179	22
650,558	100,413	431,286	134,324	1,578,063	1,171,048	1,064,796	462,231	23
64,048	7,659	36,864	9,155	169,649	134,736	114,114	43,574	
152,474	138,085	125,985	103,118	152,474	138,085	125,985	103,118	24
381,524	360,596	303,724	229,667	381,524	360,596	303,724	229,667	
24,810	25,113	20,675	17,457	24,954	26,590	20,928	18,049	25
227,869	194,274	178,684	105,893	408,165	397,188	372,590	249,472	26

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	II. Animals and Animal Products—continued.					
	Fishery Products, n.o.p.[2]—concluded.					
	Dried, Salted, Smoked or Pickled—					
1	Cod	lb.	32,526	–	400	–
		$	3,606	–	36	–
2	Herring	lb.	1,444,314	1,414,983	1,448,875	1,320,122
		$	114,218	108,471	104,899	96,833
3	Other	$	5,408	10,842	16,558	4,832
	Canned—					
4	Sardines, 8 oz. or less	box	56,155	86,766	130,829	206,599
		$	3,589	7,114	7,956	10,266
5	Sardines, other	$	245	17,069	43,668	29,260
6	Other canned fish	$	112,510	110,655	53,440	19,515
	Totals, Fishery Products, n.o.p.[1]	$	251,542	262,666	235,661	168,006
	Furs and Fur Skins—					
	Unmanufactured—					
7	Undressed (including marine)	$	874,341	611,781	366,065	239,025
8	Other	$	200,546	161,859	92,983	58,202
9	Manufactured	$	36,186	38,974	24,432	23,705
	Totals, Furs and Fur Skins	$	1,111,073	812,614	483,480	320,932
10	Bristles, animal	lb.	8,349	6,338	7,843	10,184
		$	11,973	11,993	14,396	10,806
11	Hair and mfrs. of, n.o.p	$	23,454	10,746	9,264	9,275
	Hides and Skins—					
12	Calf	cwt.	–	1,907	–	2
		$	–	25,778	–	122
13	Cattle	cwt.	3,852	5,155	1,687	173
		$	75,350	73,203	19,962	1,868
14	Sheep	cwt.	1,029	114	–	207
		$	29,456	5,104	–	11,363
	Totals, Hides and Skins[1]	cwt.	5,458	8,064	1,849	477
		$	115,880	128,689	21,979	14,223
	Leather—					
15	Unmanufactured	$	1,280,952	1,170,663	668,814	530,483
	Manufactured—					
	Boots and shoes, n.o.p.—					
16	Men's	pair	191,099	210,936	229,670	113,202
		$	680,259	721,585	592,306	334,583
17	Women's	pair	49,104	47,631	63,451	20,219
		$	93,210	87,482	80,619	36,977
18	Children's	pair	59,252	49,371	73,801	32,426
		$	55,330	46,124	45,684	22,728
19	Gloves and mitts	$	136,978	156,455	121,505	70,349
	Totals, Leather[1]	$	2,564,152	2,448,336	1,747,599	1,169,145
	Meats—					
20	Beef, fresh	lb.	132,084	303,655	–	25,290
		$	12,080	31,491	–	2,147
21	Mutton, fresh	lb.	–	39,884	–	8,622
		$	–	4,249	–	873
22	Pork, fresh	lb.	–	–	–	–
		$	–	–	–	–
23	Bacon and hams	lb.	1,658	1,178	1,195	40
		$	712	589	519	12
24	Canned meats	lb.	637,485	252,024	1,057,094	174,612
		$	99,526	59,784	192,590	39,156
25	Pork, barrelled in brine	lb.	–	–	400	–
		$	–	–	22	–
26	Pork, dry salted	lb.	–	–	–	–
		$	–	–	–	–
27	Sausage	lb.	64	–	285	–
		$	29	–	95	–
28	Soups, all kinds	$	1,512	2,302	1,087	10,396
	Totals, Meats[1]	$	277,679	251,871	325,151	167,608

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[1] Totals include other items not specified. [2] Not including turtles, shell products, seal skins, fish oils and ambergris.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
16,525	14,444	17,143	9,069	8,173,867	7,428,084	7,796,040	5,462,348	1
2,139	1,702	1,953	894	400,624	348,270	282,171	153,278	
674,980	514,576	705,853	370,078	6,861,121	5,694,866	6,396,878	5,233,001	2
67,099	34,994	45,544	21,432	660,002	289,749	300,183	190,983	
36,042	38,050	25,236	20,907	197,558	214,430	145,807	120,199	3
58,037	127,670	87,727	20,036	8,342,256	8,593,229	6,070,765	5,293,293	4
6,522	11,296	8,835	1,855	651,451	706,717	453,192	360,277	
2,450	6,136	7,692	1,237	37,590	59,091	83,397	44,820	5
403,914	442,878	250,229	173,769	820,716	937,554	595,453	470,994	6
1,320,073	1,239,603	973,126	647,220	3,685,037	3,695,431	2,885,203	2,039,609	
11,862,535	7,206,227	5,084,581	2,775,334	14,069,793	8,476,974	5,925,411	3,255,847	7
1,185,205	1,669,599	1,737,006	957,935	2,836,391	3,180,994	2,636,421	1,645,055	8
194,985	201,684	169,881	110,298	259,656	295,981	221,448	169,106	9
13,242,725	9,077,510	6,991,468	3,843,567	17,165,840	11,953,949	8,783,280	5,070,008	
226,826	222,383	202,903	178,756	273,835	279,978	276,358	197,409	10
329,557	359,934	241,065	156,263	385,401	439,417	315,416	176,384	
257,123	379,978	239,411	142,262	324,699	447,712	280,847	175,358	11
55,737	59,475	36,217	21,433	60,580	67,715	46,599	38,998	12
1,767,450	1,547,543	932,880	425,296	1,929,292	1,754,982	1,223,285	626,350	
275,789	259,266	133,436	107,456	384,367	369,115	251,699	207,374	13
6,099,308	3,713,055	1,270,522	826,958	8,613,120	5,460,207	2,731,898	1,784,658	
32,611	33,674	28,533	20,025	35,874	35,624	29,299	23,423	14
991,438	865,753	361,490	166,669	1,086,080	916,766	371,057	211,966	
378,135	362,830	212,006	157,664	507,773	486,442	345,439	281,316	
9,286,066	6,267,935	2,831,309	1,582,401	12,429,221	8,402,075	4,704,924	2,867,945	
4,637,927	4,679,656	3,490,686	2,115,121	6,009,148	5,919,500	4,311,261	2,868,887	15
80,668	102,382	91,507	38,665	275,937	319,780	330,243	153,005	16
256,927	285,000	214,371	74,837	943,269	1,017,428	824,499	410,443	
369,165	421,680	474,626	262,885	471,964	554,150	612,125	323,967	17
1,355,865	1,432,055	1,326,311	627,774	1,598,989	1,734,942	1,594,831	757,985	
24,258	43,282	46,889	36,871	84,367	94,107	127,058	72,292	18
21,888	33,868	33,525	21,976	78,476	83,606	87,689	46,823	
15,999	14,964	16,206	6,155	1,060,046	1,546,742	1,425,073	1,549,893	19
7,235,884	7,352,782	5,736,383	3,207,616	10,998,029	11,537,331	9,171,686	6,198,308	
124,831	191,286	382,170	143,008	3,292,158	4,536,114	2,003,705	350,232	20
58,873	82,516	73,195	40,853	309,643	452,602	198,936	46,727	
574,400	459,233	393,776	106,944	4,003,484	4,979,227	1,784,878	1,541,751	21
134,882	111,715	72,891	20,858	563,080	661,687	217,503	139,644	
523,876	1,179,597	948,880	18,252	523,876	1,179,597	948,880	18,252	22
85,605	178,696	137,442	4,628	85,605	178,696	137,442	4,628	
2,876,625	7,720,204	6,323,422	265,036	2,878,599	7,721,635	6,333,430	265,076	23
379,994	1,121,267	926,756	64,672	380,831	1,121,957	929,758	64,684	
395,996	512,710	393,158	119,185	5,918,875	7,029,956	8,292,069	6,122,319	24
75,333	96,443	87,037	25,269	802,422	932,488	1,134,836	657,935	
9,893,248	11,566,469	7,531,037	3,669,422	9,895,648	11,574,669	7,533,637	3,669,622	25
1,151,676	1,298,312	775,589	256,890	1,152,035	1,299,418	775,863	256,910	
1,229,143	1,809,031	1,246,940	14,647	1,229,143	1,809,151	1,246,940	14,647	26
171,908	251,489	181,959	2,835	171,908	251,508	181,959	2,835	
490,625	588,232	453,460	237,576	496,316	594,500	456,681	237,576	27
178,376	218,775	163,904	77,665	180,717	220,488	164,818	77,665	
1,847,074	1,955,277	1,472,636	172,943	1,850,607	1,974,052	1,479,070	184,416	28
4,282,706	5,634,979	4,104,059	760,555	5,904,979	7,599,473	5,584,055	1,689,749	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	II. Animals and Animal Products—concluded.					
	Milk and Its Products—					
1	Butter	lb.	610,570	1,128,672	291,380	546
		$	228,512	413,369	75,553	134
2	Cheese	lb.	75,768	194,885	52,779	54,634
		$	28,938	58,357	20,144	18,294
3	Other	$	5,766	2,584	4,100	2,558
	Oils, Fats, Greases and Waxes—					
4	Cod-liver oil	gal.	2,440	7,179	3,140	1,370
		$	3,344	6,615	1,890	1,447
5	Grease, rough, for mfr. of soaps and oils	cwt.	–	2,446	1,845	2,206
		$	–	19,714	14,745	14,875
6	Lard	lb.	96	48	14,888	7,190
		$	19	10	1,320	594
7	Lard compound	lb.	22,400	11,550	5,771	15,197
		$	2,416	1,139	501	1,096
	Totals, Oils, Fats, etc.[1]	$	18,144	44,537	34,999	45,302
8	Eggs in shell	doz.	13,542	48	92	20
		$	3,031	281	217	56
9	Eggs, n.o.p	lb.	722,161	3,588	14,082	7,926
		$	120,992	1,632	4,994	3,089
10	Gelatine	lb.	296,785	326,084	480,241	570,959
		$	67,525	74,633	108,615	115,827
11	Glue, powdered or sheet	lb.	2,126,674	2,145,469	1,598,310	1,383,426
		$	250,521	237,632	167,187	114,355
12	Sausage casings	$	–	–	48,278	139,265
	Totals, Animals and Animal Products[1].	$	**5,664,451**	**5,288,528**	**3,783,222**	**2,614,531**
	III. Fibres and Textiles.					
	Cotton—					
13	Raw, including linters	lb.	15,954	332,455	1,085,506	269,472
		$	3,343	73,134	187,888	38,797
	Yarns, Thread and Cordage—					
14	Rovings, yarns, etc., for sewing, packaging, etc	lb.	173,991	149,783	193,748	118,365
		$	108,208	72,169	73,495	47,392
15	Cordage and twine	lb.	107,662	139,189	67,283	33,942
		$	28,480	30,477	14,589	6,650
16	Crochet and knitting	lb.	850	805	199	506
		$	1,065	1,325	335	1,623
17	Yarn, No. 40 and finer, mercerized	lb.	360,216	217,614	152,712	335,293
		$	302,261	186,851	126,095	228,879
18	Yarn, two or more strands, for mfr. of thread	lb.	353,857	356,541	424,941	435,492
		$	311,574	307,716	319,929	265,450
	Piece Goods—					
19	Not bleached	yd.	8,659,477	5,981,914	6,534,743	913,930[2]
		$	885,553	633,677	516,703	343,904
20	Canton flannel, etc	yd.	385,695	417,893	171,907	154,559[2]
		$	107,002	100,151	42,301	71,718
21	Bleached or mercerized	yd.	6,676,947	6,690,034	5,155,541	982,363[2]
		$	1,012,796	1,051,594	736,663	575,332
22	Printed, n.o.p	yd.	8,339,879	7,148,496	7,049,373	1,661,416[2]
		$	1,677,236	1,384,481	1,189,440	1,056,684
23	Yarn or piece dyed	yd.	16,684,921	13,762,158	8,977,156	2,143,959[2]
		$	3,392,417	2,642,444	1,584,050	1,308,711
24	With cut pile (velveteens and corduroys)	yd.	1,481,472	1,337,479	855,070	247,826[2]
		$	802,239	704,130	398,387	248,871
	Lace and Embroidery—					
25	Embroideries	$	37,237	63,600	66,143	2,820
26	Lace, net and mfrs. of	$	707,236	628,774	445,776	266,656
	Wearing Apparel—					
27	Gloves of cotton	$	–	–	37,251	32,323
28	Socks and stockings	doz. pr.	11,051	19,090	12,384	4,961
		$	29,860	51,441	32,115	16,995
29	Other clothing	$	489,955	443,866	272,543	193,363
30	Blankets, household	$	17,644	26,645	24,823	856
31	Curtains	$	299,068	253,045	196,581	129,378
32	Handkerchiefs	$	743,023	813,442	562,259	357,671
33	Quilts, etc., not coloured	$	145,442	133,718	85,569	78,991
34	Sheets and pillow-cases, not coloured	$	371,371	429,376	308,161	236,677
	Totals, Cotton[1]	$	13,498,581	11,706,968	8,419,654	6,391,155

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[1] Totals include other items not specified.

[2] Quantities are in lb. in 1932.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
46,681	176,905	26,156	19,380	25,609,915	41,919,372	16,500,801	879,670	1
21,474	76,814	10,658	6,393	9,028,528	14,471,688	4,786,521	268,336	
357,281	386,370	269,207	158,766	1,936,196	2,063,898	1,685,045	1,377,344	2
135,204	135,468	82,528	50,965	572,049	627,107	465,666	387,258	
40,496	60,100	66,152	70,311	90,600	116,443	93,905	77,276	3
14,567	8,757	15,364	18,345	181,566	210,183	218,571	212,296	4
16,364	12,222	24,650	22,222	204,872	179,717	189,681	142,374	
112,470	139,612	219,235	257,400	122,389	156,330	222,462	260,453	5
972,775	1,119,678	1,146,778	976,197	1,052,082	1,251,280	1,169,661	995,281	
948,175	948,143	928,102	151,558	948,271	948,204	944,221	158,748	6
110,386	95,715	99,941	8,837	110,405	95,728	101,436	9,431	
1,374,756	301,470	1,159,275	116,525	1,510,132	651,797	1,455,205	354,670	7
131,975	29,716	112,737	6,552	144,243	60,700	132,798	18,375	
1,528,618	1,540,209	1,610,099	1,219,374	1,946,187	2,020,852	1,961,524	1,470,864	
1,078,258	2,796,383	113,566	41,569	1,138,207	2,853,277	158,210	56,451	8
380,323	936,422	40,959	19,958	395,513	950,357	52,547	25,061	
412,150	496,667	613,514	73,149	2,861,183	686,003	1,708,906	145,908	9
112,879	226,133	270,132	40,099	651,541	329,971	680,492	65,302	
298,465	264,452	195,201	187,654	1,698,167	1,763,807	1,904,880	1,680,618	10
230,422	203,688	128,086	133,731	590,706	658,832	610,917	448,353	
537,190	810,672	323,697	177,220	3,201,625	4,454,439	2,835,860	2,226,432	11
66,336	109,502	43,288	30,333	371,436	498,159	287,928	200,640	
223,072	220,471	104,517	100,929	2,163,664	1,547,994	1,890,517	700,500	12
42,654,255	**37,388,126**	**26,153,435**	**14,184,530**	**71,661,754**	**69,853,833**	**45,995,705**	**24,563,246**	
150,839,641	125,432,749	105,657,401	99,127,127	151,126,982	126,069,888	106,722,241	100,902,263	13
29,027,014	22,123,264	12,230,306	7,807,451	29,069,275	22,243,795	12,420,886	8,044,769	
550,806	443,057	391,720	251,883	788,937	616,596	592,162	373,481	14
327,672	252,764	199,768	136,376	462,643	336,120	278,431	189,819	
159,238	170,209	191,205	61,362	268,664	321,838	259,647	96,139	15
76,230	68,730	79,606	22,348	105,119	100,685	94,707	29,221	
5,374	1,968	2,195	7,238	52,376	70,803	43,988	22,823	16
7,716	2,442	1,076	4,030	145,267	119,185	86,690	57,561	
2,193,187	1,995,637	2,382,314	1,644,380	2,560,655	2,213,251	2,535,160	1,979,673	17
1,742,302	1,814,650	1,854,248	1,158,009	2,048,350	2,001,501	1,980,561	1,386,888	
254,859	245,155	167,375	121,565	611,217	601,696	592,316	557,057	18
256,421	218,362	126,250	80,219	572,178	526,078	446,179	345,669	
36,482,811	28,787,373	20,276,446	4,369,835[2]	45,244,920	34,847,538	26,847,811	5,301,595[2]	19
4,060,918	3,717,540	1,861,676	883,037	4,965,271	4,369,275	2,402,068	1,236,298	
779,467	127,727	251,781	69,602[2]	1,165,790	546,560	429,389	230,547[2]	20
73,669	14,965	17,247	38,208	180,803	115,204	60,027	111,571	
6,503,672	10,155,121	7,773,924	1,029,042[2]	13,467,440	17,114,597	13,196,049	2,072,255[2]	21
771,286	711,221	582,244	425,961	1,840,278	1,820,857	1,362,529	1,048,849	
9,875,889	13,857,658	12,031,958	1,528,454[2]	18,933,308	21,669,931	19,636,624	3,504,121[2]	22
1,620,746	2,209,219	1,667,383	1,151,635	3,475,321	3,777,415	3,015,086	2,375,951	
14,599,442	12,219,743	8,973,935	1,606,052[2]	33,511,827	28,481,288	20,206,683	5,413,187[2]	23
2,698,846	2,152,525	1,356,617	956,760	6,814,141	5,640,783	3,705,528	2,966,778	
486,774	310,132	379,378	241,174[2]	2,346,448	1,926,984	1,419,843	557,381[2]	24
402,393	231,582	172,139	148,987	1,548,547	1,172,813	690,573	450,232	
8,721	12,198	11,950	6,150	142,307	172,988	164,026	60,569	25
252,707	351,806	239,354	140,827	1,331,008	1,433,069	923,347	606,779	26
–	–	52,912	7,230	–	–	642,307	604,724	27
397,788	305,895	145,513	1,657	619,434	592,453	506,071	13,293	28
524,958	404,113	180,022	4,221	730,514	686,141	424,438	37,398	
867,654	1,091,735	808,983	569,125	1,624,193	1,841,665	1,314,844	928,996	29
218,898	178,378	99,463	3,321	351,897	341,764	232,422	5,520	30
120,910	90,946	81,232	73,934	601,764	526,236	418,978	316,867	31
11,568	9,195	6,464	9,304	1,096,139	1,192,755	834,382	565,488	32
26,904	10,108	11,968	33,191	175,549	145,825	105,793	137,018	33
21,285	12,920	18,825	7,140	394,999	444,969	335,613	287,939	34
46,155,922	38,513,094	23,380,263	14;706,363	63,063,246	53,826,367	35,174,433	23,942,066	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	III. Fibres and Textiles—continued.					
	Flax, Hemp and Jute—					
1	Hemp, dressed or undressed	cwt.	-	-	-	-
		$	-	-	-	-
2	Other raw flax, etc	$	11,750	9,846	7,503	5,221
3	Rovings, yarns, etc., for weaving or insulating wire	lb.	1,819,437	2,295,906	1,461,528	1,228,230
		$	334,943	449,539	235,952	174,708
4	Linen thread, for sewing	lb.	244,878	235,465	182,921	210,837
		$	311,534	268,228	201,887	223,519
5	Other yarn, thread, etc	$	305,816	287,599	236,893	155,723
6	Fabrics, flax, not bleached	yd.	2,176,796	2,108,894	1,840,420	1,180,483
		$	366,005	345,550	266,818	153,942
7	Fabrics, flax, printed, dyed or coloured	yd.	3,091,048	3,035,877	3,378,127	1,110,274
		$	575,529	544,440	517,567	229,402
8	Fabrics, flax, bleached or mercerized	yd.	523,244	790,684	607,612	339,703
		$	140,532	203,628	149,617	91,652
9	Fabrics, jute, woven	yd.	19,603,129	12,073,132	7,314,761	6,077,698
		$	2,153,714	1,341,508	672,936	484,528
10	Other fabrics	$	213,265	266,605	179,966	476,192
11	Bags	$	3,378	7,905	2,379	20,393
12	Handkerchiefs	$	531,192	621,620	482,659	327,519
13	Sheets, pillow-cases, etc	$	213,058	249,417	165,421	96,508
14	Table-cloths, napkins	$	835,313	901,631	623,407	461,473
15	Towels	$	212,882	207,215	213,723	154,926
	Totals, Flax, Hemp and Jute[1]	$	7,168,088	6,748,160	4,631,011	3,301,003
	Silk—					
16	Raw, singles, not degummed	lb.	665	113	-	-
		$	1,656	577	-	-
17	Other raw yarns and thread	$	220,069	221,669	146,869	76,998
18	Fabrics, unfinished	yd.	5,390	2,216	-	-
		$	4,022	1,952	-	-
19	Velvets and plushes	yd.	311,190	149,729	124,702	56,734
		$	302,923	171,982	108,650	53,104
20	Ribbons	$	21,554	15,988	15,116	9,659
21	Fabrics, for neckties	$	41,607	13,263	19,042	21,686
22	Other piece goods	$	330,145	264,255	131,964	54,212
23	Socks and stockings	doz. pr.	8,210	5,573	4,382	1,041
		$	62,225	45,797	29,451	7,980
24	Other apparel	$	414,087	381,876	201,020	116,470
	Totals, Silk[1]	$	1,616,325	1,329,586	786,458	383,541
	Wool—					
25	Raw, hair of the camel, etc	lb.	5,508,463	4,936,229	5,491,266	4,883,517
		$	2,670,489	2,280,124	1,810,386	1,375,645
26	Worsted tops, n.o.p	lb.	7,473,977	5,536,787	5,815,098	5,786,067
		$	4,904,599	3,284,090	2,244,863	2,036,430
27	Noils	lb.	479,630	315,933	189,673	158,208
		$	233,142	141,239	57,764	50,686
28	Yarns	lb.	4,976,777	5,648,429	5,146,116	3,364,883
		$	5,566,261	5,665,639	4,282,182	2,452,633
29	Fabrics, to be finished	sq. yd.	2,826,983[2]	1,839,067	1,518,503	558,413[2]
		$	1,159,705	750,796	546,255	559,127
30	Lustres, Italian linings	yd.	782,154[2]	535,873	328,240	64,764[2]
		$	463,811	321,708	191,181	79,578
31	Overcoatings	yd.	383,331[2]	995,152	665,883	310,856[2]
		$	477,258	1,194,536	829,079	255,801
32	Tweeds	yd.	3,869,635[2]	2,868,223	1,455,070	639,470[2]
		$	3,634,985	2,642,895	1,413,941	621,767
33	Worsteds, serges, coatings	yd.	8,423,926	6,663,242	5,383,201	3,364,428[2]
		$	11,235,198	8,794,919	6,639,043	3,870,563
34	Other piece goods	$	3,778,930	3,145,413	2,446,268	1,226,588
35	Carpets and rugs	sq. ft.	-	-	-	593,475
		$	1,421,225	1,399,621	712,810	288,926
36	Socks and stockings	doz. pr.	535,347	526,969	424,766	179,461
		$	2,211,822	2,264,536	1,752,223	735,733
37	Underwear	$	437,757	323,791	312,599	215,834
38	Women's and children's outer garments	$	216,107	256,350	176,138	84,218
39	Other apparel	$	1,447,898	1,362,160	961,326	550,965

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[1] Totals include other items not specified. [2] Quantities are in lb. in 1932.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
24,231	37,143	25,402	16,247	27,390	42,620	28,423	18,348	1
205,949	306,438	154,374	73,416	234,103	358,827	176,772	81,324	
157,077	171,650	123,591	78,448	168,026	183,976	133,448	90,477	2
944,402	538,369	713,328	166,005	2,834,112	2,883,627	2,198,486	1,433,444	3
148,899	81,586	99,557	20,019	507,839	544,568	339,817	200,853	
15,692	16,965	10,296	4,816	267,144	255,213	197,613	224,719	4
17,672	23,425	13,999	4,553	333,043	293,787	217,955	232,308	
36,764	38,890	20,304	14,974	406,810	384,112	280,756	192,048	5
8,074	6,571	4,412	210	2,300,252	2,257,401	2,021,252	1,339,466	6
1,966	1,838	1,535	82	390,498	367,680	295,574	169,816	
53,738	25,915	33,410	18,233	3,198,404	3,107,234	3,454,917	1,159,284	7
14,639	18,958	15,679	8,786	618,605	583,789	550,309	250,260	
1,993	6,887	4,635	2,081	564,404	845,163	639,298	360,281	8
464	4,206	2,055	841	157,329	229,827	165,383	98,095	
4,693,533	2,578,057	1,831,654	860,679	98,763,425	94,822,973	85,048,023	70,817,875	9
394,339	163,977	92,295	45,483	8,167,067	6,489,887	4,013,257	2,928,288	
165,760	166,393	94,159	47,463	519,632	483,220	318,486	581,550	10
206,962	209,457	184,850	127,334	254,816	283,219	255,928	166,239	11
8,819	10,313	27,892	1,844	665,305	768,522	656,440	438,782	12
5,785	2,011	6,866	17,097	230,352	262,008	189,548	265,057	13
5,474	4,191	5,537	5,341	877,127	929,660	673,787	765,106	14
17,581	5,410	3,471	3,379	237,830	219,033	237,470	212,534	15
1,976,060	2,183,262	1,691,715	894,659	15,973,551	14,955,198	10,561,171	7,671,578	
880,135	1,118,325	1,354,245	2,043,912	1,282,815	1,668,972	1,954,395	2,539,133	16
4,528,205	5,600,442	4,665,973	5,224,090	6,547,545	8,360,968	6,695,844	6,499,154	
117,956	155,046	205,550	154,646	350,971	404,056	368,845	280,527	17
45,723	25,314	879	2,794	6,868,185	5,959,107	2,497,478	408,537	18
45,854	25,425	935	2,083	3,965,131	3,344,438	1,043,164	96,872	
46,033	45,999	53,093	18,039	1,474,676	1,123,210	825,878	925,503	19
102,603	119,940	102,294	26,974	1,866,417	1,597,328	854,466	796,604	
127,085	130,991	102,612	82,931	444,256	423,359	348,229	261,924	20
319,228	242,439	239,542	155,657	1,582,080	1,508,661	1,181,154	1,009,724	21
2,074,139	1,915,021	1,784,354	783,620	8,757,796	6,219,672	4,549,037	1,895,267	22
69,288	60,101	18,263	1,802	80,923	70,197	27,132	3,592	23
581,374	495,021	124,960	15,974	683,359	582,469	194,438	33,154	
2,430,372	2,808,129	2,029,293	1,021,352	4,353,102	4,491,780	2,994,142	1,716,432	24
10,700,312	11,922,663	9,488,568	7,569,868	29,615,120	27,967,557	18,885,963	12,903,962	
4,204,026	2,517,415	1,943,026	1,356,525	14,021,917	10,334,255	10,744,883	9,624,484	25
1,503,316	947,382	496,927	244,252	5,790,470	4,306,945	3,065,691	2,262,261	
218,772	15,192	29,786	14,218	8,128,303	5,948,454	6,413,180	7,208,244	26
153,426	10,427	12,430	7,083	5,514,743	3,671,941	2,669,832	2,725,529	
38,505	20,977	46,415	707	518,695	345,409	236,088	161,156	27
26,296	6,620	7,194	471	259,844	151,513	64,958	52,555	
3,804	79,483	142,846	60,695	5,111,837	5,877,804	5,356,805	3,536,017	28
3,938	77,242	142,447	63,590	5,733,444	5,870,353	4,495,916	2,642,966	
–	–	700	2[2]	4,436,056	3,079,311	2,471,637	848,954[2]	29
–	–	357	4	1,850,516	1,218,988	879,285	860,603	
5,121	1,765	90	61[2]	788,388	541,940	329,666	65,250[2]	30
2,070	1,411	128	93	466,539	325,460	191,987	80,451	
1,406	7,728	2,770	521[2]	410,469	1,327,651	1,028,350	467,090[2]	31
1,843	12,317	5,573	901	541,625	1,624,321	1,269,103	402,048	
24,003	25,892	38,207	2,877[2]	4,244,478	3,126,691	1,790,512	763,782[2]	32
32,074	41,038	44,129	4,842	4,125,980	2,953,519	1,742,921	759,160	
39,373	46,374	25,895	6,577[2]	10,325,958	8,314,658	6,472,918	4,052,062[2]	33
59,841	88,945	54,586	20,658	13,727,659	10,908,771	7,914,472	4,666,859	
446,060	386,313	266,451	168,175	5,984,851	5,210,909	4,269,008	2,113,799	34
–	–	–	33,193	–	–	–	1,089,974	35
314,952	274,922	106,073	29,890	3,304,181	3,244,859	1,765,940	617,253	
14,455	12,357	6,036	774	553,682	549,323	440,398	183,298	36
40,688	39,030	19,168	4,303	2,277,729	2,359,794	1,823,653	758,510	
13,173	9,824	6,687	1,379	462,729	347,278	343,149	234,749	37
261,225	298,222	225,515	119,572	591,626	644,101	454,545	240,512	38
295,624	261,220	170,520	88,623	1,862,407	1,715,341	1,188,763	692,462	39

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	III. Fibres and Textiles—concluded.					
	Wool—concluded.					
1	Blankets	pair	180,430	159,673	114,463	285,420[2]
		$	827,281	816,548	591,064	149,587
2	Felt, pressed	lb.	76,580	60,991	46,532	13,983
		$	31,015	38,724	17,638	16,508
	Totals, Wool[1]	$	41,115,840	35,040,366	25,320,303	14,710,046
	Artificial Silk (rayon)—					
3	Rovings, yarns, warps, etc	lb.	53,955	67,662	312,701	229,710
		$	72,856	67,367	274,069	240,217
4	Woven fabrics, except ribbons	yd.	8,432,190	9,887,111	7,839,044	1,131,861[2]
		$	4,697,763	4,821,398	3,441,024	1,664,264
5	Other fabrics	$	30,408	15,056	13,639	2,188
6	Socks and stockings	doz. pr.	73,328	74,264	37,458	3,237
		$	360,829	341,882	170,329	14,396
	Totals, Artificial Silk[1]	$	5,301,509	5,396,552	4,016,649	2,012,769
	Other Fibres—					
7	Mexican istle, or tampico	cwt.	45	519	377	131
		$	841	7,518	3,916	2,099
8	Manila and sisal	cwt.	4,712	–	1,160	–
		$	37,919	–	7,386	–
9	Binder twine	cwt.	29,022	25,360	22,600	26,396
		$	325,336	343,108	277,334	226,640
	Totals, Other Fibres[1]	$	453,753	493,112	348,240	273,591
	Mixed Textile Products—					
10	Rags, wastes, etc	$	480,499	440,901	212,696	138,915
11	Fishing lines, nets, ropes, etc	$	1,086,777	1,273,651	1,064,916	566,037
12	Twine and cordage, n.o.p	lb.	756,980	2,025,964	1,915,016	1,236,986
		$	281,066	293,009	257,204	126,382
13	Artificial leather	$	611	841	510	771
14	Cotton fabrics, coated, rubberized, etc	$	552,911	386,295	265,847	199,962
15	Oilcloths, all kinds	sq. yd.	673,065	619,052	493,572	1,272,170[2]
		$	487,482	467,798	371,802	216,654
16	Embroideries, lace, etc., n.o.p	$	720,398	684,404	625,709	375,027
17	Garments, knitted, n.o.p. (incl. underwear)	$	1,028,779	1,136,427	898,088	659,565
18	Gloves, knitted or fabric	$	511,962	419,500	322,229	220,445
19	Hat shapes, crowns, etc	$	273,867	274,899	140,155	70,803
20	Hats, felt	$	740,787	616,434	303,876	203,247
21	Hats, caps, etc., n.o.p	$	506,186	289,872	219,047	108,013
22	Braids, etc., for hats	$	4,386	7,978	17,907	9,081
23	Surgical dressings, etc	$	156,036	232,461	199,496	167,053
	Totals, Mixed Textiles[1]	$	7,866,964	7,529,077	5,684,805	3,477,832
	Totals, Fibres and Textiles[1]	$	**77,021,060**	**68,243,821**	**49,207,120**	**30,509,937**
	IV. Wood, Wood Products and Paper.					
	Wood, Unmanufactured or Partially Mfrd.—					
24	Railway ties	No.	–	–	–	8
		$	–	–	–	12
	Sawmill Products—					
	Lumber and timber—					
25	Chestnut	M ft.	–	–	–	–
		$	–	–	–	–
26	Gumwood	M ft.	–	–	–	–
		$	–	–	–	–
27	Oak	M ft.	–	10	8	–
		$	–	5,183	2,770	–
28	Pitch pine	M ft.	2	–	–	–
		$	418	–	–	–
29	Yellow poplar	M ft.	–	–	–	–
		$	–	–	–	–
30	Walnut	M ft.	–	10	–	–
		$	–	3,952	–	–
31	Veneers	$	3,377	6,729	5,142	6,154
	Totals, Wood, Unmfrd. or Partially Mfrd.[1]	$	19,993	49,410	28,953	10,701

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[1] Totals include other items not specified.

[2] Quantities are in lb. in 1932.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
27,298	47,848	38,965	8,908[2]	228,487	251,370	159,769	296,039[2]	1
66,239	136,538	122,086	6,916	925,462	1,015,465	729,848	157,913	
168,475	722,437	86,984	13,148	504,900	1,071,691	357,751	119,794	2
77,625	136,289	61,474	20,045	262,561	360,820	216,817	106,141	
3,601,113	3,021,193	1,904,194	847,084	54,428,616	46,644,026	33,637,656	19,597,697	
63,878	54,904	64,215	54,120	2,240,704	2,132,362	2,569,574	1,501,739	3
87,392	80,144	105,435	50,099	2,153,747	1,678,450	1,760,829	927,742	
3,598,442	4,416,435	3,141,720	191,280[2]	15,313,240	20,049,045	21,474,671	2,482,722[2]	4
1,413,483	1,750,850	1,269,659	387,347	7,850,519	9,466,146	8,000,416	3,375,691	
45,289	55,948	28,510	42,868	290,518	221,998	229,434	240,396	5
297,054	373,728	151,510	3,781	387,545	517,008	375,357	8,774	6
635,780	745,233	287,924	9,163	1,044,052	1,249,267	698,153	26,730	
2,382,566	2,907,535	1,957,050	637,788	11,876,363	13,418,910	11,521,404	5,045,161	
24,667	3,872	1,044	924	25,105	4,790	1,593	1,384	7
184,615	54,298	18,436	14,841	193,274	67,096	24,971	20,972	
709,587	453,678	469,824	442,392	745,831	459,588	485,442	465,693	8
5,452,967	3,773,122	2,976,763	1,740,508	5,766,251	3,822,613	3,068,576	1,844,738	
138,233	21,895	17,933	1,589	279,654	182,258	106,109	220,981	9
1,566,442	266,336	234,814	18,162	2,912,755	1,845,305	1,159,570	1,521,773	
7,581,919	4,372,057	3,401,715	1,883,041	9,795,697	6,761,901	4,720,188	3,654,231	
1,894,810	2,015,572	1,377,824	961,024	2,782,320	2,899,252	1,945,078	1,289,847	10
1,062,204	1,173,004	600,586	326,627	2,294,969	2,604,125	1,738,703	968,866	11
451,458	983,352	634,398	496,290	2,441,706	3,283,441	2,790,376	2,115,387	12
118,526	269,423	126,532	68,094	432,198	596,580	414,202	227,513	
414,555	233,081	170,918	55,610	415,934	234,243	171,562	56,593	13
1,689,554	1,367,232	907,219	543,453	2,271,441	1,771,818	1,188,159	750,946	14
893,425	1,315,661	840,930	273,557[2]	1,567,975	1,944,403	1,337,367	1,553,102[2]	15
400,752	442,561	279,590	63,970	889,392	915,534	652,035	281,284	
183,148	184,753	125,923	59,970	1,404,508	1,769,757	1,562,148	825,495	16
168,370	192,831	140,840	142,686	1,498,731	1,708,340	1,470,648	1,238,780	17
76,342	82,544	26,525	15,585	1,607,384	1,438,830	472,499	346,767	18
25,163	30,570	10,301	6,098	488,424	650,390	326,939	295,466	19
456,649	300,134	184,115	111,152	1,748,786	1,527,205	868,769	589,445	20
633,881	636,039	554,821	319,218	1,481,018	1,381,135	1,173,832	807,052	21
186,657	211,281	178,008	233,735	460,966	550,136	758,060	564,907	22
464,313	317,301	283,459	227,871	634,283	566,492	492,089	397,345	23
9,491,895	9,077,793	6,420,914	4,405,224	21,686,580	21,667,293	16,216,207	11,064,667	
81,889,787	**71,997,597**	**48,244,419**	**30,944,027**	**206,439,173**	**185,241,252**	**130,717,022**	**83,879,362**	
888,732	777,750	450,587	233,814	888,738	777,750	450,587	233,822	24
869,379	797,750	547,717	328,132	869,388	797,750	547,717	328,144	
7,782	7,114	4,976	3,390	7,782	7,114	4,976	3,390	25
426,894	366,771	248,956	180,122	426,894	366,771	248,956	180,122	
22,416	21,082	14,679	9,339	22,499	21,156	14,679	9,344	26
942,458	961,218	611,835	353,691	951,237	968,525	611,835	354,076	
45,996	40,699	25,385	20,202	46,098	40,800	25,435	20,388	27
2,791,033	2,685,170	1,457,227	1,044,673	2,802,491	2,701,062	1,464,905	1,058,479	
41,480	32,212	10,939	4,787	41,482	32,212	10,939	4,787	28
1,318,488	1,111,394	332,131	135,061	1,318,906	1,111,394	332,131	135,061	
11,564	12,919	6,193	4,013	11,564	12,919	6,193	4,013	29
585,067	651,513	312,185	161,929	585,067	651,513	312,185	161,929	
7,329	6,749	5,612	4,745	7,335	6,759	5,612	4,745	30
942,210	805,405	610,026	357,752	942,939	809,357	610,026	357,752	
993,600	1,166,542	875,242	765,422	997,463	1,212,631	890,384	775,958	31
16,245,433	14,833,901	9,482,480	5,610,189	16,639,349	15,348,150	9,808,816	5,755,866	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	IV. Wood, Wood Products and Paper—concl.					
	Wood, Manufactured—					
1	Barrels, empty	No.	9,614	1,981	35	17
		$	103,552	23,279	208	31
2	Staves, of oak	M	–	–	–	–
		$	–	–	–	–
3	Other cooperage	$	184	–	34	–
4	Corks	lb.	69,597	30,904	24,884	25,797
		$	48,396	22,793	13,800	13,670
5	Other cork mfrs	$	3,736	4,129	3,855	7,230
6	Turned and carved wood	$	18,837	15,650	13,725	41,688
7	Wood-pulp	cwt.	–	–	15	–
		$	–	–	69	–
8	Doors	$	919	534	–	–
9	Fibre, kartavert, and manufactures of	$	4,499	1,414	1,000	987
10	Furniture	$	544,649	627,691	330,156	168,505
	Totals, Wood, Manufactured[1]	$	933,229	931,457	558,676	304,571
	Totals, Wood and Wood Products[1]	$	953,222	980,867	587,629	315,272
	Paper—					
11	Chipboard, not pasted	lb.	–	–	–	–
		$	–	–	–	–
12	Newsboard	lb.	115,230	103,584	316,984	–
		$	9,921	8,271	17,521	–
13	Strawboard	lb.	560	21,088	10,891	560
		$	18	546	516	22
14	Other paper boards	$	40,400	21,324	28,181	36,705
15	Book paper for magazines, not coated	lb.	51,179	23,887	24,581	25,617
		$	3,845	1,929	2,569	1,572
16	Book and printing paper, not coated, n.o.p.	lb.	2,213,659	2,518,513	2,046,312	1,657,499
		$	188,881	213,895	171,552	136,054
17	Surface-coated paper	lb.	–	–	181,441	57,911
		$	–	–	29,604	9,804
18	Printing paper, n.o.p	$	33,664	91,434	51,703	38,150
19	Wrapping and packing paper	$	64,821	101,447	119,929	105,294
20	Writing paper and stationery, n.o.p	$	98,738	114,414	89,493	68,727
21	Envelopes	M	6,676	8,077	7,304	5,276
		$	24,691	23,099	24,640	15,933
22	Wall paper	roll	554,641	543,340	336,463	375,251[2]
		$	136,750	130,884	74,565	48,860
23	Paper boxes and containers	$	22,233	37,795	29,806	15,156
	Totals, Paper[1]	$	1,532,436	1,665,590	1,467,176	1,180,763
	Books and Printed Matter—					
24	Newspapers and magazines	$	23,709	49,604	40,402	77,760
25	Photographs, chromos, engravings, prints.	$	154,308	155,351	160,603	53,905
26	Advertising printed matter	lb.	356,642	421,872	491,560	396,457
		$	130,544	172,079	197,190	159,187
27	Labels, tags, tickets, etc	$	67,923	63,490	49,038	37,162
28	Bibles, hymn books, etc	$	173,131	158,291	158,765	191,697
29	Text books	$	599,607	529,701	525,108	559,059
	Totals, Books and Printed Matter[1]	$	2,449,371	2,604,245	2,485,999	2,330,989
	Totals, Wood, Wood Products and Paper[1]	**$**	**4,935,029**	**5,250,702**	**4,540,804**	**3,827,024**
	V. Iron and Its Products.					
30	Iron ore	ton	7	–	–	–
		$	448	–	–	–
	Pigs, Ingots, Blooms and Billets—					
31	Pig iron	ton	6,499	7,872	3,016	4,350
		$	106,599	138,774	53,661	70,083
32	Ferro-silicon and ferro-manganese	cwt.	42,888	111,140	58,001	8,375
		$	142,717	345,140	162,634	14,716
	Totals, Pigs, Ingots, Blooms and Billets[1]	$	296,072	533,734	261,524	136,482
33	Scrap iron or steel	ton	–	66	–	70
		$	37	250	–	163

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[1] Totals include other items not specified. [2] Quantities are in lb. in 1932.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
179,828	133,034	87,034	41,341	193,150	137,734	88,590	43,006	**1**
372,808	179,594	82,701	40,406	486,835	210,549	85,698	41,949	
9,029	9,201	4,355	3,130	9,029	9,201	4,355	3,130	**2**
848,578	922,036	266,476	151,551	848,578	922,036	266,476	151,551	
329,967	406,325	280,553	214,654	330,405	406,425	280,587	214,654	**3**
109,396	134,349	84,397	67,844	487,849	411,540	355,298	317,268	**4**
113,477	125,979	97,069	83,715	362,602	298,564	269,543	218,695	
449,234	445,683	308,873	288,935	823,641	882,194	587,101	429,835	**5**
749,828	612,927	300,409	193,003	776,047	636,767	320,110	253,877	**6**
439,980	386,833	266,743	324,684	439,980	386,833	306,917	328,924	**7**
1,085,817	1,000,863	585,410	672,548	1,085,817	1,000,863	647,365	681,308	
585,676	595,179	347,927	139,823	586,595	595,766	347,937	140,210	**8**
329,439	320,485	270,999	197,991	337,542	325,691	274,503	200,184	**9**
2,298,240	3,171,620	1,896,028	698,863	3,228,217	4,157,460	2,526,139	1,006,876	**10**
10,258,234	10,590,087	6,444,443	3,951,101	12,386,421	12,707,244	8,013,842	4,817,836	
26,503,667	25,423,988	15,926,923	9,561,290	29,025,770	28,055,394	17,822,658	10,573,702	
10,602,203	8,283,864	5,445,566	2,506,494	10,602,203	8,294,364	5,445,566	2,506,494	**11**
223,496	160,727	105,741	61,045	223,496	161,092	105,741	61,045	
11,123,653	16,300,040	15,456,272	–	11,256,147	16,616,533	15,804,359	–	**12**
494,628	635,457	543,713	–	505,405	652,535	563,393	–	
8,807,912	7,857,337	984,052	759,058	10,319,775	9,794,235	1,196,857	1,686,769	**13**
226,466	201,920	24,803	21,630	257,916	233,333	28,980	33,956	
790,366	830,912	758,150	1,168,234	833,500	856,820	788,737	1,210,058	**14**
5,922,567	6,346,282	4,696,743	50,352	5,973,746	6,370,169	4,721,324	75,969	**15**
313,888	332,173	238,005	2,078	317,733	334,102	240,574	3,650	
5,110,149	6,274,952	4,523,568	4,300,825	7,423,806	8,887,899	6,742,136	6,077,447	**16**
368,223	573,617	411,865	298,781	567,625	795,531	596,531	443,185	
–	–	1,469,444	1,196,840	–	–	2,143,398	1,734,881	**17**
–	–	363,389	305,398	–	–	433,435	358,153	
119,910	660,451	184,635	112,371	166,670	815,733	248,335	155,712	**18**
591,731	676,061	775,796	419,651	869,287	1,100,808	1,151,590	675,960	**19**
220,994	264,110	136,806	82,717	363,789	423,384	261,806	180,267	**20**
51,662	59,458	54,158	38,768	63,936	73,135	69,278	51,505	**21**
131,918	142,385	136,673	114,878	167,329	181,530	179,256	147,478	
3,426,653	2,419,010	2,348,543	1,047,410[2]	4,170,399	3,176,029	2,758,990	1,519,327[2]	**22**
432,074	324,728	250,249	95,788	611,806	517,658	344,092	157,851	
1,330,104	1,304,404	968,423	649,765	1,393,255	1,401,527	1,028,278	686,790	**23**
10,678,222	11,592,086	9,350,363	6,403,568	13,649,415	14,764,904	12,082,870	8,825,141	
2,827,261	4,140,690	4,116,620	3,644,063	2,860,056	4,197,860	4,165,517	3,734,439	**24**
1,165,732	1,172,630	1,118,132	480,555	1,467,556	1,500,949	1,436,476	585,387	**25**
6,843,920	7,849,958	5,242,522	3,287,544	7,296,754	8,064,106	5,888,504	3,791,318	**26**
3,415,102	3,096,811	2,044,226	1,217,027	3,581,304	3,324,009	2,300,960	1,421,352	
270,679	272,341	223,884	144,806	359,036	352,399	288,186	194,738	**27**
161,217	162,835	161,306	150,667	461,917	461,720	468,170	480,762	**28**
627,253	719,244	702,187	603,534	1,329,989	1,352,744	1,331,503	1,237,836	**29**
13,382,405	14,720,169	12,860,742	9,619,969	16,539,633	18,130,779	16,136,501	12,609,325	
50,564,294	**51,736,243**	**38,138,028**	**25,584,827**	**59,214,818**	**60,951,077**	**46,042,029**	**32,008,168**	
1,565,042	1,639,700	868,972	544,909	2,272,130	2,456,919	1,428,970	802,163	**30**
3,425,168	3,995,917	2,103,470	1,213,794	4,391,269	5,020,921	3,266,402	1,698,983	
38,514	22,573	6,463	3,309	46,425	31,618	10,445	8,039	**31**
632,028	395,087	116,357	56,862	757,660	552,984	184,214	132,510	
14,318	24,606	48,149	4,821	129,568	190,648	116,581	18,264	**32**
117,968	96,308	368,517	31,911	483,876	629,056	600,417	64,525	
2,263,792	1,747,337	804,224	357,071	3,143,014	2,716,924	1,217,833	606,093	
138,752	134,291	102,229	50,127	141,915	136,322	104,388	51,908	**33**
1,547,549	1,485,932	976,689	430,366	1,571,233	1,501,754	996,275	442,347	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	V. Iron and Its Products—continued.					
	Castings and Forgings—					
1	Axles, parts and blanks	$	7,924	3,903	10,622	11,443
2	Wheel tires, locomotive and car	cwt.	86,320	90,742	50,651	30,777
		$	415,441	440,289	244,964	147,362
	Totals, Castings and Forgings[1]	$	456,804	496,090	316,286	202,903
	Rolling-mill Products—					
3	Band and hoop	cwt.	29,951	34,557	22,211	13,886
		$	130,663	160,704	218,977	65,211
	Bars and Rails—					
4	Railway rails	ton	41	346	64	21
		$	1,720	9,614	2,716	817
5	Other bars and rails	cwt.	147,743	148,909	93,685	78,090
		$	1,020,642	1,040,652	580,110	431,981
	Plates and Sheets—					
6	Boiler plate	cwt.	1,361	2,277	8,223	20,809
		$	2,709	4,512	20,852	40,650
7	Tinned plates	cwt.	525,686	528,618	723,016	806,008
		$	2,415,503	2,445,624	3,314,665	3,073,057
8	Plates, not less than 30 in. by ½ in., n.o.p.	cwt.	120,684	274,848	1,925	–
		$	241,390	477,975	3,453	–
9	Sheets, ·080 in. thick or less, n.o.p.	cwt.	146,755	210,626	225,012	135,529
		$	421,550	643,649	649,073	340,069
10	Plates, rolled, more than 60 in. wide	cwt.	–	–	279,926	447,176
		$	–	–	480,241	859,303
11	Sheets coated with metal	cwt.	230,774	261,109	251,415	171,334
		$	864,285	950,300	897,328	541,398
12	Sheets for mfr. coated sheets	cwt.	158,719	141,395	209,838	149,716
		$	415,304	371,790	559,369	304,697
13	Skelp for pipe	cwt.	196,846	150,862	142,028	46,495
		$	496,690	381,370	370,652	120,360
14	Rods	cwt.	11,151	2,209	236	11,200
		$	14,343	3,346	547	15,208
15	Structural iron	$	264,846	824,746	441,562	345,731
	Totals, Rolling-mill Products[1]	$	6,736,940	7,816,798	7,692,823	6,335,686
	Tubes, Pipe and Fittings—					
16	Boiler tubes	$	55,198	32,360	109,151	80,745
17	Cast iron pipe	ton	370	978	4,209	2,595
		$	17,537	38,373	128,913	77,646
18	Pipe fittings	$	15,844	10,693	21,047	1,446
	Totals, Tubes, Pipe and Fittings[1]	$	534,580	475,249	474,406	266,221
	Wire—					
19	Barbed fencing	cwt.	581	260	1,706	2,218
		$	1,887	817	9,312	10,382
20	Galvanized, not telegraph or telephone	cwt.	627	3,394	422	765
		$	3,520	19,256	1,105	2,126
21	Woven or welded wire fencing	$	–	–	198,316	59,530
22	Steel wire for rope	cwt.	135,458	166,421	115,866	82,400
		$	826,374	1,056,126	726,622	532,480
23	Wire, twisted, braided, etc., wire rope	$	255,189	303,355	242,401	152,274
	Totals, Wire[1]	$	1,487,676	1,857,541	1,227,287	793,981
24	Chains	$	220,023	239,805	162,593	81,559
	Engines and Boilers—					
25	Boilers and parts	$	18,770	20,473	15,772	4,051
26	Engines, aircraft	No.	192	181	70	12
		$	294,529	495,016	247,315	54,245
27	Engines for trucks, gasolene or steam	No.	–	1	–	–
		$	–	1,206	–	–
28	Engines, automobile, n.o.p.	No.	–	–	2	–
		$	–	–	12,046	8,667
29	Engines, diesel, and parts	No.	–	–	47	64
		$	–	–	213,875	159,765
30	Locomotives and parts	No.	–	2	–	–
		$	–	36,172	–	–
	Totals, Engines and Boilers[1]	$	1,118,507	1,235,961	740,909	317,587

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
1,541,635	1,025,706	404,915	358,200	1,549,559	1,029,609	415,892	369,718	1
122,185	118,698	89,375	67,732	208,505	209,440	140,026	98,509	2
524,850	502,913	379,428	296,560	940,291	943,202	624,392	443,922	
6,402,306	3,998,939	2,147,126	1,610,246	6,867,521	4,497,406	2,769,782	1,827,548	
1,000,120	1,121,877	534,171	309,943	1,295,373	1,238,321	605,451	369,315	3
4,142,934	4,113,778	1,941,115	1,006,885	4,461,282	4,532,933	2,358,573	1,176,880	
31,130	22,313	15,006	9,874	33,858	25,279	15,916	10,266	4
989,909	781,101	501,212	370,941	1,054,406	852,718	521,939	378,547	
3,287,886	2,307,180	671,014	267,502	3,930,977	3,055,374	1,338,518	540,706	5
8,410,381	6,028,346	2,226,951	810,520	10,223,968	8,069,852	3,375,738	1,524,214	
239,390	226,186	141,953	69,829	241,463	229,106	151,157	92,190	6
594,653	557,880	320,834	141,576	601,061	563,933	343,417	184,386	
1,093,246	1,012,559	1,064,781	44,682	1,618,969	1,541,177	1,787,797	851,149	7
5,592,924	5,258,093	5,470,952	211,850	8,008,574	7,703,717	8,785,617	3,285,617	
1,419,257	1,447,510	83,566	–	1,749,913	1,987,492	88,187	–	8
2,771,393	2,822,544	164,431	–	3,335,877	3,724,845	171,773	–	
1,446,090	1,301,158	886,239	546,062	1,640,672	1,552,287	1,146,375	701,857	9
5,086,015	4,765,475	3,139,132	1,856,438	5,566,984	5,489,780	3,852,531	2,226,112	
–	–	802,986	348,462	–	–	1,163,955	863,185	10
–	–	1,461,620	621,058	–	–	2,055,184	1,558,734	
450,669	452,724	272,967	93,407	682,133	718,110	528,035	268,199	11
1,700,423	1,749,844	956,954	364,658	2,566,409	2,710,455	1,864,835	915,409	
502,849	675,735	890,757	123,979	661,568	815,030	1,100,595	273,695	12
1,399,481	1,934,689	2,355,811	349,864	1,814,785	2,306,479	2,915,180	654,561	
2,873,827	3,248,716	2,390,354	998,226	3,172,428	3,400,660	2,533,515	1,092,761	13
5,229,156	5,967,542	4,192,155	1,857,001	5,859,725	6,350,654	4,564,676	2,028,601	
296,690	502,383	482,023	234,079	1,096,776	1,040,878	714,693	428,750	14
572,292	955,506	783,006	424,885	1,634,302	1,727,773	1,093,769	667,891	
10,819,130	13,004,728	5,187,118	2,744,870	11,828,234	14,789,071	6,120,485	3,404,695	15
49,915,575	50,239,478	31,024,249	12,974,380	60,187,907	61,934,303	40,613,750	20,512,246	
935,352	1,083,311	673,214	397,579	1,092,018	1,229,700	874,656	552,849	16
1,601	2,438	898	208	5,672	5,894	8,871	3,403	17
90,316	120,092	68,570	13,516	201,527	220,761	287,143	106,967	
1,185,045	1,519,104	909,947	389,110	1,203,243	1,551,144	932,304	402,014	18
3,884,483	5,191,177	2,804,607	1,255,536	4,697,279	5,948,162	3,528,079	1,654,609	
68,208	64,642	63,426	14,210	113,229	98,721	122,608	47,724	19
224,285	201,744	187,192	39,076	353,585	316,154	334,214	125,010	
209,784	88,030	27,899	3,733	212,350	92,699	28,526	13,933	20
537,023	217,720	68,661	9,967	545,541	240,546	70,154	38,626	
–	–	190,712	99,106	–	–	447,315	178,306	21
19,687	12,326	4,828	396	155,145	178,973	121,125	82,796	22
128,258	76,792	30,360	2,819	954,632	1,135,749	759,849	535,299	
134,478	121,394	106,167	28,425	407,078	466,309	367,642	215,205	23
1,997,228	1,484,523	944,231	380,576	3,806,253	3,658,798	2,436,667	1,347,425	
752,418	613,428	321,094	131,672	1,030,694	885,155	510,363	227,009	24
641,365	1,018,710	342,561	130,058	660,135	1,039,183	365,207	134,109	25
27	41	65	38	224	222	136	52	26
248,876	368,517	198,632	107,770	549,622	863,533	451,350	167,768	
–	2,818	1,444	2,499	–	2,819	1,444	2,499	27
–	360,894	209,229	285,818	–	362,100	209,229	285,818	
118,817	66,687	27,955	22,786	118,817	66,689	27,957	22,786	28
11,727,816	6,956,897	5,270,749	4,646,781	11,727,816	6,957,137	5,283,597	4,656,513	
–	–	166	88	–	–	242	181	29
–	–	1,041,679	534,322	–	–	1,408,480	761,091	
121	78	78	17	121	80	78	17	30
1,151,286	487,112	546,702	166,236	1,151,286	523,284	546,702	166,236	
18,033,362	13,845,194	9,115,354	6,797,307	19,307,250	15,146,437	10,033,964	7,210,249	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	V. Iron and Its Products—continued.					
	Farm Implements and Machinery—					
1	Cream separators	No.	521	–	–	–
		$	11,862	–	–	–
2	Other dairy machinery	$	739	8,786	6,862	34,623
3	Harvesters	No.	–	–	–	–
		$	–	–	20	–
4	Other harvesting implements	$	13,736	7,813	8,601	6,533
	Planting and Tillage—					
5	Drills and parts	$	267	1,010	81	–
6	Harrows and parts	$	2,791	2,771	277	136
7	Ploughs and parts	$	93	176	692	49
8	Other planting	$	1,224	1,514	1,119	1,480
	Seed Separation—					
9	Threshing machine separators	No.	–	–	–	–
		$	–	–	–	–
10	Threshing machine separator parts	$	1,163	–	–	–
11	Combined harvester-threshers and parts	No.	–	–	–	–
		$	–	–	–	–
12	Traction engines, farm, $1,400 or less	No.	–	12	15	3
		$	–	9,508	9,013	1,187
13	Other farm tractors, parts and repairs	$	372	65,614	24,242	8,419
	Totals, Farm Implements and Mach'ry[1]	$	141,766	168,502	121,091	108,605
	Hardware and Cutlery—					
14	Cutlery	$	741,932	675,529	566,500	403,757
	Hardware—					
15	Needles and pins	$	205,807	217,158	198,229	218,384
16	Nuts and bolts	cwt.	4,752	3,980	4,042	2,084
		$	22,353	19,338	26,166	14,247
17	Screws	$	1,329	1,490	981	711
18	Locks	$	26,870	37,703	11,987	7,218
	Totals, Hardware and Cutlery[1]	$	1,133,003	1,116,982	868,390	678,979
	Machinery (except Agricultural)—					
19	Cleaners, vacuum	No.	–	1	6	–
		$	–	24	317	–
20	Sewing machines	No.	11,980	8,335	5,960	1,000
		$	209,489	134,435	113,553	38,555
21	Sewing machine parts and attachments	$	249,397	280,503	99,676	40,834
22	Washing machines, domestic	No.	1	7	1	2
		$	384	8,628	35	1,075
23	Diamond drills and parts	$	12,449	29,657	7,435	–
24	Ore crushers, stamp mills, etc	$	193,015	338,597	258,227	210,011
25	Rock drills	$	12,703	88,612	73,560	98,690
26	Well-drilling machinery and equipment	$	2,280	23,191	8,524	840
27	Other mining and metallurgical machinery	$	109,324	146,318	181,015	67,923
	Office or Business—					
28	Adding machines	No.	3	–	3	5
		$	104	–	405	518
29	Typewriters	No.	19	195	541	184
		$	1,171	11,302	33,818	11,698
30	Other office or business	$	4,873	417	428	4,476
	Printing and Bookbinding—					
31	Printing presses	$	139,945	218,783	188,631	122,843
32	Typesetting machines	$	15,294	1,107	1,517	898
33	Other printing and bookbinding	$	53,582	51,291	143,365	50,260
34	Air compressors	$	114,849	149,071	81,069	64,653
35	Coke and gas machinery	$	291,149	254,564	70,262	26,784
36	Cranes and derricks	$	37,733	56,949	64,940	481
37	Ice-making and refrigerating machinery	$	206	2,050	2,250	–
38	Lathes, metal-working	$	68,526	76,429	55,440	23,975
39	Logging equipment	$	83,031	28,367	34,481	326
40	Metal-working machines, n.o.p	$	119,831	187,419	456,296	249,126
41	Paper- and pulp-mill machinery	$	343,642	39,892	14,863	4,803
42	Pumps, power, and parts	$	66,640	99,192	66,733	38,450
43	Road machinery (incl. rollers and scrapers)	$	–	–	27,238	12,205
44	Rolling-mill machines	$	905	5,108	6,252	10,211
45	Shovels, steam and electric	$	46,510	6,808	7,357	82
46	Textile machinery	$	753,498	911,294	595,684	783,325
	Totals, Machinery (except Agricultural)[1]	$	3,997,457	4,558,199	3,773,148	2,600,519

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
10,112	11,238	14,763	5,920	19,451	22,010	23,838	10,530	1
586,484	681,530	859,311	338,323	853,495	955,182	1,089,904	455,721	
216,238	248,385	178,455	154,205	219,659	259,113	188,170	191,686	2
7,566	5,155	3,028	257	7,567	5,155	3,029	257	3
1.993,528	5,031,997	1,439,502	54,399	1,998,914	5,032,950	1,439,947	54,399	
497,186	423,413	395,735	65,755	535,412	464,648	434,595	82,136	4
993,564	709,572	210.488	13,714	997,168	710,582	210,569	13,714	5
736,249	752,051	315.530	18,852	739,213	755,770	317,069	19,122	6
2,151,498	2,211,835	994,308	22,914	2,158,059	2,229,851	997,793	23,449	7
354,822	299,233	189,723	51,013	372,802	315,033	191,062	53,156	8
7,323	1,970	854	54	7,323	1,970	855	54	9
7.884.772	2.137.415	737,982	48,019	7,884,772	2,137,415	738,195	48,019	
1.220,041	473,641	235,382	21,785	1,221,204	475,084	235,548	21,785	10
–	–	1,524	13	–	–	1,524	13	11
–	–	2,215,159	17,008	–	–	2,215,159	17,008	
21,777	14,979	5,479	471	21,777	15,276	6,550	473	12
18,931,613	12,395,796	4,179,964	334,445	18,931,613	12,573,398	4,816,839	334,658	
2,648,639	2,645,778	2,243,439	578,491	2,649,021	2,744,403	2,325,881	600,339	13
39,826,254	29,338,753	15,408,492	3,049,102	40,292,899	30,075,453	16,495,217	3,315,542	
404,998	425,342	326,346	229,745	1,704,873	1,644,128	1,294,512	981,768	14
229,993	246,309	212,338	131,026	471,462	515,181	450,695	385,326	15
46.284	47,529	29.472	19,189	51,261	52,476	34,101	21,676	16
570.120	520.624	329.076	224,309	593,877	543,517	357,620	240,443	
175.133	226.571	108,189	86.008	183,144	241,199	117,917	88,389	17
493,685	527.625	365.722	162,446	567,663	605,375	408,928	193,640	18
2,869,146	3,067,518	1,968,829	1,300,361	4,774,857	4,950,119	3,404,989	2,469,475	
5,957	7,189	17,527	7,237	5,988	7,204	17,560	7,745	19
171,341	269,534	774,907	241,105	171,799	269,954	779,358	249,556	
12,764	13,843	9,119	5,425	24,805	22,361	15,389	6,441	20
522,039	544,468	356,921	257,799	735,410	683,957	472,138	297,700	
222,366	190,249	142,451	106,924	473,350	471,324	243,195	150,426	21
24,722	22,995	14,807	6,919	24,758	23,002	14,809	6,921	22
1,661,013	1,565,479	1,040,286	521,261	1,662,425	1,574,107	1,040,381	522,342	
853,295	600.987	170.236	26.851	872,040	638,674	177,671	26,931	23
429,350	1,141.218	974,553	440,006	669,028	1,550,810	1,340,246	674,282	24
618,281	790,596	419,280	236,997	635,189	879,986	493,296	335,904	25
1,776,941	5,461,999	1,738,555	276,929	1,779,221	5,486,190	1,859,936	279,645	26
1,449,055	2,474,976	2,161,822	843,187	1,570,243	2,711,629	2,446,668	935,976	27
9,897	8,501	5,061	1,966	9,923	8,553	5,113	2,030	28
1,268,044	1,109,286	594,879	445,678	1,269,423	1,112,992	603,167	454,632	
20,832	18,706	10,533	8,112	21,044	19,120	11,155	8,316	29
1,112,228	952,537	499,302	285,620	1,115,982	968,907	534,427	297,561	
684,679	740,114	869,811	523,652	689,553	740,768	870,625	528,241	30
3,232,033	1,642,514	1,376,223	1,135,537	3.515,309	2,020,851	1,668,796	1,343,785	31
1,136,936	1,086,194	715,987	453,893	1,161,653	1,087,727	718,205	454,965	32
1,001,225	885,414	858,715	542,211	1,093,572	991,603	1,068,864	654,431	33
1,273,003	1,371,917	609,350	304,773	1,393,839	1,529,322	693,006	377,627	34
247,505	210,400	289,433	29,251	538,654	470,278	359,695	56,167	35
1,357,874	1,505,161	725,654	83,414	1,395,607	1,587,734	793,594	83,895	36
1,222,026	680,034	313,442	485,070	1,222,232	682,084	315,692	485,070	37
882,053	706,958	324,375	203,561	958,485	792,166	394,039	229,583	38
1,271,518	1,355,004	276,588	127,107	1,424,028	1,407,050	318,313	127,859	39
4,546,620	4,797,712	2,872,514	2,112,638	4,702,307	5,089,769	3,382,395	2,403,392	40
1,390,874	1,213,541	1,088,177	299,302	1,757,950	1,259,567	1,110,701	310,789	41
1,130,989	1,714,231	838,701	447,581	1,210,636	1,834,449	916,095	487,445	42
–	–	1,085,147	188,124	–	–	1,113,474	200,329	43
562,672	795,057	911,656	88,661	563,577	801,705	931,548	100,792	44
1,487,139	2,387,776	1,007,973	399,412	1,533,649	2,394,584	1,015,330	402,615	45
3,825,228	4,900,235	3,003,389	2,621,379	5,038,465	6,434,394	3,661,193	3,513,243	46
55,162,068	63,265,685	39,478,026	21,124,340	60,835,452	69,712,030	44,360,038	24,387,589	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	V. Iron and Its Products—concluded.					
1	Springs	$	491	603	4,250	2,629
	Stamped and Coated Products—					
2	Tin cans	$	42,873	53,333	4,546	–
3	Hollow-ware, enamelled	$	88,554	83,555	72,047	74,748
4	Other stamped and coated products	$	93,755	135,958	140,071	110,133
5	Tools and hand implements	$	312,845	324,657	244,508	186,221
	Vehicles—					
6	Automobiles, freight	No.	98	140	102	34
		$	218,300	312,413	255,703	90,428
7	Automobiles, passenger	No.	55	43	49	74
		$	119,891	133,733	199,664	248,241
8	Automobile parts	$	41,055	52,754	74,615	41,045
9	Railway cars, all kinds	No.	64	157	114	–
		$	2,500	10,071	22,262	–
10	Railway cars, parts of	$	196,421	66,751	184,185	16,272
	Totals, Vehicles[1]	$	778,258	871,671	967,833	606,802
11	Drums, tanks, cylinders	$	67,414	85,186	60,152	46,742
12	Furniture	$	26,017	35,809	22,722	17,088
13	Railway ties, fish-plates, intersections, switches, etc	$	6,146	4,248	12,943	13,906
14	Scales, balances, weighing apparatus, etc	$	24,282	31,112	37,133	49,974
15	Stoves, apparatus for cooking and heating buildings	$	8,641	3,975	32,568	22,444
16	Valves	$	55,292	71,952	52,356	80,542
	Totals, Iron and Its Products[1]	$	**18,802,533**	**21,323,484**	**18,069,505**	**13,383,622**
	VI. Non-Ferrous Metals.					
	Aluminium—					
17	Bauxite (ore)	cwt.	–	–	–	–
		$	–	–	–	–
18	Cryolite	cwt.	–	–	–	–
		$	–	–	–	–
19	Aluminium, ingots, bars, sheets	lb.	844,990	1,134,520	2,000,102	1,435,901
		$	675,435	291,766	450,677	346,900
	Totals, Aluminium[1]	$	331,966	387,462	533,994	425,244
	Brass—					
20	Scrap	cwt.	224	103	9	1,000
		$	3,182	521	68	3,250
21	Bars and rods	cwt.	3,297	4,446	3,013	2,756
		$	50,803	76,368	44,854	37,280
22	Strips, sheets, plates	cwt.	1,126	1,884	1,042	697
		$	22,360	43,260	19,400	10,928
23	Tubing	lb.	652,255	1,065,255	727,055	573,190
		$	140,539	257,790	150,969	101,321
24	Wire, plain	lb.	37,322	64,627	36,524	60,083
		$	11,332	19,826	8,326	13,478
	Totals, Brass[1]	$	647,749	850,231	694,287	452,480
	Copper—					
25	Blocks, pigs, ingots	cwt.	–	–	–	–
		$	–	–	–	–
26	Scrap	cwt.	710	122	–	–
		$	9,934	1,504	–	–
27	Bars and rods	cwt.	52	367	224	179
		$	922	7,944	4,159	2,537
28	Strips, sheets, plates	cwt.	2,556	2,978	1,273	1,494
		$	63,135	77,780	26,330	26,103
29	Tubing	lb.	266,218	410,977	208,879	166,571
		$	62,724	115,058	46,549	33,499
	Totals, Copper[1]	$	298,241	489,248	179,647	140,992
30	Lead and its products	$	171,078	182,950	189,957	78,404
	Nickel—					
31	Bars, rods, sheets, etc	lb.	2,276	191	111,939	157,743
		$	848	85	17,910	37,221
32	Nickel-plated ware	$	239,029	279,690	154,809	139,659
33	Other nickel	$	139,789	81,998	73,696	35,202

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
275,503	300,259	149,500	131,566	276,479	300,993	154,099	134,197	1
474,134	580,830	452,920	78,351	520,454	638,461	457,890	78,351	2
323,265	292,864	225,755	132,883	525,322	493,897	425,589	299,887	3
1,250,041	1,220,503	1,365,143	996,044	1,370,826	1,388,462	1,545,326	1,145,750	4
2,427,399	2,412,356	1,528,208	708,723	3,194,980	3,192,449	2,078,213	1,078,492	5
7,319	4,936	2,883	764	7,417	5,078	2,987	799	6
8,577,629	6,089,769	3,656,587	848,542	8,795,929	6,403,794	3,913,361	939,306	
42,386	33,777	16,990	4,708	42,447	33,834	17,058	4,796	7
34,041,286	27,911,295	13,115,908	3,550,050	34,173,547	28,060,872	13,358,529	3,816,447	
55,467,166	35,536,938	19,399,181	13,361,750	55,761,414	35,746,929	19,597,213	13,451,825	8
1,010	1,107	874	233	1,118	1,368	1,006	233	9
871,882	881,578	345,095	147,567	877,147	899,177	367,968	147,567	
1,406,110	1,502,565	1,112,418	136,236	1,602,729	1,569,316	1,296,603	153,333	10
101,891,031	73,846,161	39,146,757	18,593,333	102,946,783	74,938,096	40,313,897	19,280,121	
1,185,313	1,491,886	877,410	403,587	1,461,321	1,745,030	1,104,177	585,737	11
1,220,324	1,495,153	952,909	419,521	1,259,964	1,558,941	991,858	442,691	12
381,818	498,929	248,961	116,402	391,024	505,449	264,828	130,476	13
416,726	595,268	343,293	162,839	455,303	634,504	384,661	217,796	14
862,436	759,434	1,618,275	870,239	878,487	771,914	1,658,076	897,041	1[illegible]
854,583	1,354,057	866,245	435,259	920,762	1,432,828	923,959	518,796	1[illegible]
316,095,527	**282,192,471**	**167,674,719**	**81,005,384**	**345,194,597**	**314,366,791**	**193,933,477**	**98,811,706**	
2,292,091	2,194,464	2,167,172	1,636,609	3,374,249	2,684,164	2,173,892	1,636,609	17
3,617,806	2,961,621	3,323,990	2,730,764	3,797,416	3,068,581	3,325,955	2,730,764	
10,783	2,755	1,385	2,633	68,181	47,602	46,296	47,333	18
76,269	23,114	10,699	21,613	297,712	191,490	190,799	191,813	
694,941	1,272,209	1,070,632	407,562	1,552,588	2,415,301	3,071,272	1,869,192	19
224,918	335,759	282,699	108,725	470,512	629,842	733,486	457,839	
5,451,905	5,220,867	5,196,573	4,019,571	6,370,036	6,058,864	6,135,570	4,746,334	
50,350	24,874	12,961	968	53,347	25,765	13,599	1,969	20
599,172	339,518	127,996	6,469	625,027	344,905	133,305	9,725	
6,018	4,604	3,465	1,482	9,245	9,050	6,478	4,238	21
121,948	106,382	73,813	22,487	170,967	182,750	118,667	59,767	
14,441	9,508	7,077	4,277	15,637	11,392	8,119	4,975	22
281,177	226,701	132,658	71,662	305,321	269,961	152,058	82,608	
3,162,369	2,822,957	2,773,540	1,975,240	3,845,790	3,915,697	3,516,084	2,565,654	23
744,808	718,437	529,221	313,994	892,573	981,844	684,265	418,912	
398,043	424,774	504,921	206,498	435,365	489,967	544,786	268,402	24
99,891	124,775	108,738	45,869	111,223	144,817	117,999	59,822	
5,699,042	5,712,015	3,765,108	2,463,365	6,755,538	7,000,455	4,768,722	3,195,481	
93,156	110,350	69,751	2,767	93,156	110,350	69,751	2,767	25
1,474,620	2,059,869	805,247	28,939	1,474,620	2,059,869	805,247	28,939	
72,422	24,214	16,854	2,206	73,341	25,357	17,197	2,216	26
1,080,009	421,454	179,806	21,788	1,092,120	435,298	183,445	21,840	
443,089	469,312	307,246	45,291	444,141	470,189	307,470	45,470	27
7,023,390	8,821,880	3,935,938	474,809	7,040,012	8,838,477	3,940,097	477,346	
28,789	16,859	18,320	5,626	31,450	19,886	19,883	7,503	28
604,890	445,586	374,186	95,374	670,010	524,400	406,135	127,424	
2,320,837	2,081,463	1,823,558	1,530,369	2,610,568	2,501,680	2,035,672	1,699,401	29
565,582	563,973	389,965	284,238	633,464	681,285	437,113	318,213	
12,715,820	14,365,059	6,867,135	1,421,418	13,067,992	14,898,632	7,070,753	1,581,591	
132,693	136,279	130,014	66,721	403,644	393,145	373,810	200,918	30
766,755	1,472,948	758,730	421,831	769,031	1,473,139	870,669	579,574	31
296,408	378,695	298,178	179,398	297,256	378,780	316,088	216,619	
2,269,322	2,362,577	1,350,123	798,947	2,858,227	3,022,935	1,778,039	1,130,199	32
523,439	673,582	415,152	236,699	668,410	769,482	496,055	292,715	33

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	VI. Non-Ferrous Metals—concluded.					
	Precious Metals—					
1	Electro-plated ware	$	960,333	1,078,823	749,371	411,500
2	Silver in bars, blocks, etc	$	34,899	18,798	26,006	85,931
3	Other precious metals	$	366,844	315,308	204,532	140,134
	Tin—					
4	Blocks, bars, pigs	cwt.	22,843	11,907	8,224	4,295
		$	1,112,963	538,193	238,631	109,384
5	Foil	lb.	7,618	1,520	4,294	1,874
		$	7,099	963	2,892	1,378
6	Other (collapsible tubes)	$	20,762	31,945	22,237	38,194
	Zinc—					
7	Spelter	lb.	122,080	–	–	13,451
		$	7,032	–	–	476
8	Sheets and plates	lb.	69,461	373,847	69,112	49,909
		$	4,980	20,194	3,905	2,370
9	Other zinc	$	2,371	2,175	26,533	9,621
10	Phosphor tin and bronze	lb.	229,746	185,535	198,276	100,505
		$	77,318	73,081	61,690	29,377
11	Clocks and watches	$	70,110	83,441	51,620	41,581
	Electric Apparatus—					
12	Batteries, storage (and parts)	No.	34	613	51	19
		$	319,258	312,939	358,688	183,960
13	Electric heating and cooking apparatus	$	1,431	5,529	751	1,471
14	Dynamos, generators	$	294,116	534,031	336,897	117,541
	Incandescent Lamps—					
15	Carbon filament	$	322	731	217	232
16	Metal filament	$	3,304	2,377	1,594	1,945
17	Electric light fixtures	$	19,382	36,982	22,154	14,015
18	Meters	$	41,246	53,634	88,857	41,496
19	Motors	$	547,644	627,605	567,147	304,639
20	Spark plugs, etc	$	15,060	14,685	5,181	21,262
21	Switches, etc	$	63,764	328,379	154,900	71.601
22	Telegraph instruments	$	19,523	105,401	59,781	28,103
23	Telephone instruments	$	215,866	228,640	420,308	260,153
24	Transformers	$	17,511	111,385	386,418	319,305
25	Radio tubes	$	26,439	29,312	20,784	9,997
26	Wireless and radio apparatus, n.o.p	$	89,550	74,490	66,284	32,291
	Totals, Electric Apparatus, n.o.p.[1]	$	1,927,193	2,727,203	2,768,802	1,653,346
27	Gas apparatus	$	5,818	5,964	5,931	2,978
	Printing Materials (except Machinery)—					
28	Stereotypes	sq. in.	68,788	53,700	27,890	58,745
		$	4,239	3,858	2,515	2,562
29	Other printing materials	$	19,524	20,360	15,409	48,259
30	Manganese oxide	cwt.	31	18	31	31
		$	105	64	80	99
31	Antimony, not ground	lb.	75,373	15,680	6,720	81,976
		$	8,600	1,768	589	5,995
32	Mercury	lb.	33,670	103,685	2,152	850
		$	50,132	142,789	2,721	1,134
33	Lamps, sidelights, etc	$	34,347	50,815	17,341	7,161
34	Articles for shipbuilding	$	193,330	312,532	144,075	238,475
	Totals, Non-Ferrous Metals[1]	$	**6,853,173**	**7,828,832**	**6,320,121**	**4,284,756**
	VII. Non-Metallic Minerals.					
35	Asbestos, other than crude	$	130,447	140,114	118,756	101,692
	Clay and Clay Products—					
36	China clay	cwt.	228,697	277,071	268,407	204,272
		$	118,337	142,585	133,103	81,171
37	Fire clay	cwt.	25,650	25,732	25,843	14,526
		$	7,819	8,122	6,874	7,403
38	Bricks, building	M	60	306	281	119
		$	3,511	12,564	10,334	4,563
39	Bricks, fire	$	177,930	225,679	179,002	176,678
40	Brick and tile, n.o.p	$	403,132	478,319	347,978	246,575
41	Pottery and chinaware	$	2,748,025	3,084,255	2,742,533	2,512,620
42	Artificial teeth	$	2,465	389	412	551
43	Bathtubs, etc	$	461,368	461,227	354,128	256,361
	Totals, Clay and Clay Products[1]	$	3,957,778	4,450,270	3,822,307	3,328,963

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
238,506	245,501	158,181	85,620	1,276,130	1,399,482	943,405	521,413	1
994,601	822,038	524,605	433,513	1,029,524	851,923	550,878	520,241	2
376,030	400,854	228,257	127,049	820,437	772,402	486,089	293,698	3
24,961	40,480	39,707	32,790	58,928	56,318	49,727	38,095	4
1,307,892	1,767,359	1,161,730	837,209	2,987,502	2,488,074	1,458,362	975,274	
90,231	98,094	44,732	21,251	97,849	100,104	49,331	23,343	5
49,139	49,868	20,509	8,509	56,238	51,008	23,540	10,099	
22,941	28,389	35,915	25,361	43,703	60,334	58,648	63,555	6
1,959,286	2,820,678	1,048,013	8,962	2,104,802	2,929,405	1,048,013	22,413	7
116,605	170,600	45,425	637	125,011	176,987	45,425	1,113	
4,423,329	4,574,503	2,923,359	2,745,859	9,975,498	11,430,802	4,612,252	3,853,479	8
365,655	379,780	237,857	217,047	731,195	820,409	323,611	263,385	
205,023	194,590	187,555	157,151	210,345	201,048	318,155	170,349	9
463,715	501,822	331,689	157,960	788,266	812,826	794,143	520,539	10
191,530	223,435	121,506	48,402	303,054	342,476	260,872	155,686	
1,333,282	1,225,146	819,287	607,662	3,576,029	3,495,659	2,551,866	1,763,763	11
29,462	20,486	12,374	7,533	29,499	21,257	12,527	7,581	12
312,274	296,226	254,874	208,184	631,557	609,509	615,815	392,331	
380,505	515,941	469,069	298,910	384,065	525,104	471,882	306,639	13
1,248,639	1,805,282	682,001	293,448	1,557,009	2,486,956	1,263,378	446,112	14
5,914	106,029	28,824	9,878	56,211	168,261	88,358	33,779	15
69,819	45,447	20,635	15,460	134,063	71,536	35,750	44,882	16
1,040,948	1,085,413	949,607	641,698	1,102,905	1,181,572	1,012,336	696,995	17
365,072	335,421	261,880	139,477	408,173	391,364	354,664	184,142	18
3,599,225	3,889,867	2,128,875	1,413,784	4,306,317	4,657,349	2,742,463	1,750,859	19
1,081,650	1,147,858	442,777	210,017	1,108,818	1,175,379	458,330	239,937	20
1,536,082	2,448,794	1,318,914	815,441	1,613,250	2,783,507	1,533,265	892,990	21
473,382	481,577	322,563	276,651	493,061	586,978	382,344	304,754	22
1,638,358	2,794,470	2,123,521	850,937	1,854,548	3,023,433	2,544,619	1,111,663	23
447,460	647,624	389,948	163,211	482,677	817,290	780,439	483,208	24
220,366	551,007	216,145	82,832	246,853	580,379	236,929	92,829	25
5,601,920	9,869,151	7,737,067	4,004,418	5,692,263	9,975,649	7,845,188	4,067,380	26
24,410,750	34,177,488	23,413,446	12,646,875	26,775,215	37,611,263	26,804,362	14,672,423	
249,837	275,565	196,395	90,438	263,405	285,358	209,561	94,838	27
5,909,885	6,089,206	5,588,762	7,372,578	5,985,608	6,144,269	5,618,652	7,434,367	28
332,763	367,386	323,791	423,146	337,953	371,435	326,738	426,107	
280,673	273,910	93,187	236,116	305,407	297,064	256,328	288,616	29
26,147	31,238	20,757	52,854	2,130,491	1,981,548	1,973,139	532,506	30
55,968	79,705	49,896	88,281	1,053,780	998,217	983,942	279,576	
1,595,545	1,288,538	1,202,132	613,617	1,850,511	1,509,246	1,308,576	783,048	31
141,790	102,561	75,228	37,823	165,271	120,654	82,631	49,004	
130,621	120,261	52,127	17,227	202,296	379,372	59,190	24,528	32
171,400	168,299	77,313	19,978	274,148	523,352	88,821	27,938	
1,463,156	1,360,712	488,675	123,219	1,644,898	1,573,409	593,592	162,709	33
1,163,299	2,198,161	910,472	290,349	1,479,127	2,657,184	1,134,544	546,959	34
63,117,952	**75,683,919**	**49,161,117**	**27,026,602**	**76,858,365**	**90,421,154**	**60,959,034**	**34,301,105**	
784,119	804,287	727,020	441,051	929,897	952,650	856,880	556,352	35
194,825	240,255	185,515	125,289	423,963	518,270	454,267	330,160	36
128,518	163,803	138,162	85,440	247,391	306,987	271,550	167,198	
1,344,879	1,492,286	1,043,620	735,872	1,371,621	1,519,581	1,070,717	750,643	37
280,825	317,774	200,247	147,389	289,555	326,994	208,230	155,066	
12,678	15,129	13,097	3,698	14,792	15,435	13,378	3,817	38
245,394	274,769	299,505	118,716	257,121	287,333	309,839	123,279	
1,799,807	2,420,831	1,526,678	933,668	1,978,074	2,654,934	1,708,942	1,111,402	39
380,585	536,924	400,528	250,783	940,264	1,223,871	919,021	701,201	40
424,394	480,904	295,820	191,144	4,886,062	5,492,602	4,399,784	3,557,152	41
429,439	482,699	389,623	513,047	431,938	483,089	390,259	518,909	42
121,613	192,104	191,477	77,237	583,195	654,091	546,853	336,302	43
4,478,579	5,578,767	4,024,077	2,756,898	10,417,260	12,256,769	9,432,135	7,195,457	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	VII. Non-Metallic Minerals—concluded.					
	Coal and Coal Products—					
1	Coal, anthracite	ton	552,974	786,530	918,252	886,938
		$	3,686,131	4,906,974	5,658,951	4,764,291
2	Coal, bituminous	ton	146,908	121,375	145,375	118,998
		$	472,939	400,529	485,562	330,078
3	Coal for ships' stores	ton	–	–	–	–
		$	–	–	–	–
4	Coal tar, crude	gal.	–	–	504	1,750
		$	–	–	290	359
5	Carbolic oil	gal.	262,536	500,078	13,059	749,730
		$	52,167	85,202	6,308	77,983
6	Coke	ton	29,354	11,162	16,443	2,957
		$	158,997	63,297	65,806	16,342
	Totals, Coal and Coal Products[1]	$	4,370,345	5,458,683	6,217,375	5,191,735
	Glass and Glassware—					
7	Carboys, bottles, jars, milk bottles, etc.	$	100,110	131,104	77,854	77,112
8	Tableware	$	66,099	84,893	59,831	50,670
9	Incandescent lamp bulbs and tubing for	$	–	53	–	–
10	Lamp chimneys, shades and globes	$	884	2,411	8,337	1,558
11	Window glass, common	sq. ft.	2,197,366	2,285,619	1,830,095	590,331
		$	83,864	86,472	89,953	29,947
12	Plate Glass, not over 7 sq. ft.	sq. ft.	666,360	810,272	552,532	429,743
		$	214,992	255,248	177,887	123,753
13	" " 7 to 25 sq. ft.	sq. ft.	281,751	398,396	299,582	165,063
		$	121,916	157,308	135,255	68,831
14	" " other, not bevelled	sq. ft.	598,542	569,739	347,674	269,005
		$	252,793	223,760	152,221	127,408
	Totals, Glass and Glassware[1]	$	1,226,413	1,375,117	988,124	670,139
15	Graphite and its products	$	49,605	42,118	38,625	32,119
	Petroleum, Asphalt and Their Products—					
16	Asphalt, solid	cwt.	121	499	–	5
		$	398	443	–	28
	Crude Petroleum—					
17	For refining	gal.	–	–	–	–
		$	–	–	–	–
18	Other, ·8235 specific gravity and heavier	gal.	–	–	–	–
		$	–	–	–	–
19	Fuel oil for ships' stores	gal.	–	–	–	–
		$	–	–	–	–
20	Coal, and kerosene oil, refined	gal.	–	208	155	–
		$	–	60	24	–
21	Gasolene, casinghead, for blending	gal.	–	–	–	–
		$	–	–	–	–
22	Gasolene, n.o.p.	gal.	–	–	–	800
		$	–	–	–	381
23	Lubricating oils	gal.	387,414	486,295	352,890	263,340
		$	264,736	295,378	235,429	150,673
	Totals, Petroleum, Asphalt, etc.[1]	$	303,690	314,529	263,580	168,663
	Stone and Its Products—					
24	Abrasives	$	258,039	181,295	125,740	97,137
25	Building and paving stone	$	100,653	91,943	97,781	48,872
26	Cement	cwt.	80	45,911	315,659	46,145
		$	162	58,241	361,426	55,368
27	Silica sand	cwt.	3	896	–	392
		$	36	1,199	–	324
28	Whiting	cwt.	180,724	190,343	140,425	127,386
		$	99,006	106,564	77,402	61,909
	Totals, Stone and Its Products[1]	$	605,723	566,491	727,312	316,973
29	Carbons, electric	$	507	938	999	377
30	Diamonds, unset	$	1,085,847	928,488	413,051	155,577
31	Insulators, electric	$	7,060	6,508	6,044	4,264
32	Salt	cwt.	511,836	464,978	419,546	493,584
		$	246,433	205,268	185,756	221,030
33	Sulphur	cwt.	4	26	2	157
		$	10	82	9	414
	Totals, Non-Metallic Minerals[1]	$	**12,100,661**	**13,601,753**	**12,902,472**	**10,286,241**

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
3,312,093	3,235,032	2,731,862	2,069,577	3,882,418	4,136,399	3,946,987	3,022,519	1
24,753,718	23,991,078	20,145,856	15,294,560	28,529,122	29,582,590	27,729,452	20,342,736	
13,077,619	13,764,563	12,854,544	9,692,076	13,224,564	13,886,010	12,999,942	9,811,074	2
25,430,255	25,888,784	23,296,206	14,366,070	25,903,628	26,290,339	23,782,073	14,696,148	
658,960	461,338	346,579	275,545	658,960	461,338	346,579	275,545	3
1,177,524	877,042	655,159	433,446	1,177,524	877,042	655,159	433,446	
5,109,898	5,707,914	3,932,619	1,517,275	5,110,218	5,707,994	3,938,067	1,519,025	4
359,012	429,699	248,480	104,970	359,119	429,724	250,023	105,329	
1,152,221	1,400,053	957,888	778,697	1,915,528	2,485,061	1,917,044	2,045,935	5
213,402	254,635	179,847	130,005	361,373	441,126	316,999	262,618	
1,133,635	1,156,363	993,031	638,583	1,171,663	1,171,355	1,001,445	641,766	6
6,448,037	6,319,199	5,202,394	3,392,904	6,647,955	6,403,354	5,268,200	3,410,256	
58,539,199	57,916,923	49,843,127	33,787,619	63,136,083	64,183,342	58,117,809	39,320,214	
1,241,419	1,367,572	1,149,194	780,986	1,524,950	1,719,438	1,379,610	974,667	7
636,706	678,459	613,891	502,163	1,048,599	1,114,983	1,019,453	792,095	8
514,695	547,367	501,727	528,272	560,261	596,970	506,735	528,525	9
400,872	436,140	356,898	223,735	465,136	521,273	419,077	271,676	10
142,309	607,452	185,105	251,087	44,315,528	53,189,468	35,032,296	21,765,468	11
17,617	43,928	20,468	13,779	1,168,734	1,649,494	1,118,965	649,745	
1,152,611	1,314,225	1,475,860	1,283,216	5,337,647	4,344,865	2,575,535	1,861,062	12
414,614	488,116	485,545	437,633	1,469,900	1,319,727	817,286	608,300	
209,427	154,564	250,039	200,658	1,013,248	1,050,429	728,051	432,984	13
83,917	65,706	96,521	77,190	360,294	391,176	301,131	173,273	
254,474	177,936	177,931	132,748	1,452,506	1,570,203	840,232	602,415	14
103,732	75,082	68,845	54,319	565,950	629,433	363,530	270,214	
4,861,164	5,081,152	4,392,617	3,453,191	9,717,519	10,453,706	7,875,293	5,744,616	
87,803	109,597	65,057	91,723	137,443	151,715	103,745	124,343	15
983,874	1,069,157	808,045	674,621	983,995	1,071,856	823,654	674,826	16
838,627	822,478	601,548	479,870	839,025	824,271	611,464	480,148	
613,877,907	839,762,765	667,240,169	713,833,943	865,335,849	1,110,169,704	994,384,918	1,016,355,361	17
24,890,441	35,962,583	25,169,919	14,694,171	35,365,847	48,332,001	36,220,413	22,132,665	
49,721,798	51,546,604	49,410,723	33,235,429	54,845,275	67,736,736	61,896,977	59,677,494	18
1,989,461	1,890,595	1,724,881	1,127,101	2,204,975	2,535,096	2,240,276	1,975,687	
28,276,261	26,983,829	25,310,182	28,365,547	33,096,277	31,163,811	33,799,370	36,178,989	19
860,068	707,243	644,998	762,584	984,524	824,526	875,743	922,649	
3,751,810	4,831,014	4,906,761	3,176,248	3,752,170	4,833,637	4,906,916	3,176,248	20
338,887	428,823	342,394	198,439	338,971	429,377	342,418	198,439	
–	–	14,793,714	31,357,459	–	–	14,793,714	31,357,459	21
–	–	1,182,165	2,022,281	–	–	1,182,165	2,022,281	
152,619,597	169,619,047	129,718,284	65,222,912	152,658,272	169,626,215	142,011,931	84,465,498	22
18,034,215	18,867,547	13,608,320	6,694,785	18,038,367	18,869,236	15,008,613	7,729,425	
15,892,207	16,833,040	15,855,003	13,043,511	17,283,090	16,323,178	16,213,717	13,343,143	23
4,518,282	5,175,690	4,622,583	3,231,655	4,785,355	5,474,108	4,860,168	3,395,821	
52,876,140	65,257,177	49,129,873	30,264,638	64,053,306	78,768,061	62,659,658	39,986,222	
4,346,197	3,876,280	2,101,184	854,747	4,646,551	4,126,629	2,258,104	995,313	24
498,695	672,621	460,812	190,954	713,129	875,095	679,316	335,183	25
116,803	153,497	130,466	78,693	121,209	246,085	447,075	126,129	26
144,497	174,918	143,380	80,454	149,436	247,709	505,112	136,517	
2,611,351	3,982,743	2,510,946	1,536,247	3,267,476	4,702,068	3,103,913	2,006,238	27
307,896	411,714	263,690	187,245	371,776	481,143	328,191	228,062	
107,908	107,960	80,883	43,559	345,220	357,951	245,566	199,598	28
72,274	69,582	50,850	32,906	198,989	207,394	139,683	107,860	
7,306,630	7,402,916	5,021,792	2,930,697	8,537,893	8,702,988	6,356,004	3,793,045	
439,503	468,860	404,877	325,315	450,265	493,523	436,733	350,855	29
60,150	19,259	44,016	11,986	3,182,289	3,193,871	1,797,225	711,034	30
416,584	417,678	465,621	231,554	432,145	453,595	501,525	248,103	31
2,161,623	1,583,691	1,992,215	1,222,725	3,741,721	3,415,651	2,526,003	2,540,772	32
686,981	496,286	305,079	379,586	1,106,728	897,925	658,446	730,400	
3,571,653	4,729,088	3,497,699	2,411,969	3,572,163	4,729,965	3,498,462	2,415,122	33
2,937,814	3,822,267	3,101,146	2,221,641	2,938,804	3,823,245	3,102,740	2,226,934	
135,154,049	**149,293,985**	**118,984,418**	**77,871,155**	**166,964,231**	**186,496,388**	**153,578,658**	**102,147,347**	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	VIII. Chemicals and Allied Products.					
1	Acids	$	391,376	449,586	344,047	254,454
2	Cellulose products	$	91,852	77,648	58,766	71,877
3	Drugs and medicinal preparations	$	1,043,526	981,262	819,302	854,255
	Dyeing and tanning materials—					
4	Coal tar and aniline dyes	lb.	126,035	165,067	171,672	185,360
		$	82,456	88,834	105,046	170,833
5	Oak, oak bark, quebracho extracts	lb.	223,789	237,676	257,189	173,780
		$	13,089	9,916	8,779	5,543
	Totals, Dyeing and Tanning Materials[1]	$	153,008	159,137	188,742	275,784
6	Explosives	$	58,877	59,803	47,666	40,657
	Fertilizers, n.o.p.—					
7	Potash, muriate of	cwt.	–	–	–	–
		$	3	–	–	–
8	Soda nitrate	cwt.	240	1,460	2,318	560
		$	1,233	3,082	4,953	919
9	Superphosphates	cwt.	100	112	–	–
		$	80	50	–	–
	Totals, Fertilizers, n.o.p.[1]	$	11,986	52,382	53,385	20,521
	Paints, Pigments and Varnishes—					
10	Litharge	cwt.	16,579	20,827	5,859	9,967
		$	111,305	156,173	40,511	63,876
11	Lead, red	lb.	927,859	1,067,560	586,275	689,120
		$	63,997	80,046	45,654	43,748
12	Black, carbon	lb.	3,250	2,768	14,644	10,960
		$	83	48	698	702
13	Blacks, other	lb.	387,942	350,890	25,017	156,970
		$	16,242	16,357	1,234	6,553
14	Lithopone	lb.	2,032,522	2,565,553	1,660,360	1,986,951
		$	78,185	102,057	67,393	68,676
15	Oxide of cobalt, etc	lb.	115,504	101,527	79,400	43,758
		$	60,290	37,354	21,804	9,594
16	Oxides, fireproofs	lb.	1,546,355	1,532,397	1,212,715	1,147,832
		$	157,440	152,425	102,074	125,938
17	Zinc, white	lb.	427,169	488,211	1,725,426	3,367,105
		$	21,817	28,187	85,082	143,709
18	Liquid fillers, etc	gal.	132,627	157,556	97,732	39,857
		$	168,807	177,143	159,369	58,953
19	Varnish, lacquers, etc	gal.	27,695	25,014	34,212	11,733
		$	44,200	41,426	62,151	22,036
	Totals, Paints, etc.[1]	$	895,101	933,754	718,692	669,955
	Perfumery, Cosmetics—					
20	Perfumes, alcoholic	$	32,032	43,420	19,912	8,885
	Totals, Perfumery, Cosmetics[1]	$	262,840	301,350	262,220	173,710
	Soaps—					
21	Castile	lb.	6,203	3,166	5,049	10,383
		$	637	415	432	755
22	Laundry, common	lb.	162,950	276,854	62,265	71,374
		$	14,400	24,864	5,577	6,507
	Totals, Soaps[1]	$	164,520	164,273	139,669	103,397
	Chemicals, Inorganic, n.o.p.—					
23	Sulphate of alumina	cwt.	17,332	38,042	34,153	43,893
		$	19,113	31,471	30,879	43,420
24	Ammonia, nitrate of	lb.	4,048,000	4,915,891	5,175,750	1,120,000
		$	154,145	184,066	184,950	43,070
25	Sal ammoniac	lb.	428,581	434,867	216,067	225,055
		$	21,976	19,423	8,529	8,304
26	Compounds of tetraethyl lead	lb.	–	–	–	–
		$	–	–	–	–
27	Copper sulphate	lb.	1,388,227	839,436	3,696,615	1,226,478
		$	70,432	45,854	164,132	46,139
28	Chlorine, liquid	lb.	–	–	–	11,200
		$	–	–	–	580
29	Chloride of lime	lb.	2,502,953	2,940,670	2,383,118	2,092,061
		$	39,598	45,228	34,569	27,319

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[1] Totals include other items not specified.

Kingdom, United States and All Countries, fiscal years 1929-32—continued.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
504,049	486,522	506,300	526,225	1,116,543	1,179,588	1,062,907	985,807	1
2,274,061	2,314,080	2,104,200	2,210,417	2,619,303	2,787,612	2,470,522	2,631,038	2
1,946,554	2,057,508	2,053,618	1,465,898	3,727,106	3,808,721	3,802,875	3,104,482	3
2,261.135	2,258,649	2,137,077	2,281,991	3,738,270	3,882,323	3,930,498	4,067,175	4
1,073,872	1,086,906	1,006,864	1,086,690	1,921,960	1,981,504	2,096,667	2,255,217	
40,379,235	27,730,705	21,629,557	22,833,901	41,382,901	28,093,640	22,341,556	25,509,338	5
1,565,157	1,027,066	743,011	657,685	1,616,590	1,044,277	774,775	738,346	
2,963,271	2,498,173	1,997,993	2,019,744	3,981,720	3,548,656	3,285,908	3,445,810	
445,948	445,319	355,625	290,385	557,025	562,111	434,422	353,795	6
147,285	115,007	150,093	126,654	400,977	393,656	652,504	526,017	7
291,482	215,047	303,488	229,763	706,002	709,843	1,186,274	887,830	
355,760	325,421	242,769	239,359	560,056	696,582	543,375	304,819	8
824,109	717,564	512,194	477,154	1,238,961	1,447,825	1,090,939	621,769	
1,630,960	1,924,744	2,060,963	1,552,822	1,879,922	2,108,382	2,337,660	1,774,820	9
1,041,557	1,141,876	1,093,925	748,617	1,168,295	1,232,098	1,223,048	833,009	
3,658,882	3,304,735	2,991,808	1,782,462	4,847,498	5,033,592	5,205,318	3,367,752	
21,946	26,187	34,814	12,326	44,584	51,129	41,743	22,428	10
166,169	208,070	225,624	70,883	314,445	393,518	273,136	135,612	
234,889	421,165	820,670	455,818	1,451,678	1,811,982	1,480,080	1,165,979	11
18,154	37,032	60,774	31,807	100,795	140,855	111,183	76,878	
13,934,402	14,228,223	11,373,523	10,120,314	14,039,959	14,355,462	11,436,610	10,199,327	12
935,933	921,295	488,660	345,714	944,973	932,529	494,623	353,082	
1,213,133	869,361	893,394	740,499	1,759,994	1,334,659	947,895	921,049	13
95,527	84,994	66,977	53,804	126,080	108,107	70,723	62,645	
7,019,095	8,380,059	6,367,105	7,439,738	17,259,510	19,637,486	15,062,103	14,532,280	14
343,498	400,157	301,544	330,651	760,802	863,381	667,500	591,901	
152,545	177,006	165,697	171,114	272,899	281,049	245,785	221,752	15
76,026	77,523	50,686	46,333	137,329	115,330	72,648	57,026	
5,343,250	5,496,089	5,346,176	4,404,260	7,184,925	7,461,436	6,952,908	5,747,494	16
566,118	614,443	515,473	519,774	750,154	800,843	653,725	669,628	
14,370,937	14,153,008	8,625,534	4,681,516	18,965,657	17,787,070	13,899,949	10,661,623	17
950,278	921,792	559,465	318,398	1,228,178	1,150,547	838,865	580,106	
286,283	313,904	221,662	136,010	426,672	481,591	328,662	180,740	18
411,984	417,930	330,870	193,903	595,479	615,345	507,426	262,398	
120,859	105,122	86,511	57,822	149,307	130,789	121,249	70,486	19
210,160	199,321	154,883	103,348	256,283	242,624	218,341	127,900	
4,135,617	4,218,451	3,000,924	2,192,167	5,854,804	5,957,078	4,368,048	3,291,342	
22,209	32,060	32,186	22,781	243,839	234,366	208,872	131,461	20
721,179	762,900	726,327	555,903	1,419,897	1,450,318	1,353,919	1,005,066	
42,671	20,141	30,154	9,557	1,145,803	1,300,531	1,192,383	1,299,043	21
5,314	2,928	3,819	1,204	90,248	97,616	85,548	79,305	
9,382,356	11,136,804	10,540,415	7,084,889	9,593,746	11,456,672	10,648,446	7,183,072	22
698,381	831,067	782,940	552,291	716,653	859,273	791,680	560,378	
865,807	1,005,861	957,897	656,566	1,162,051	1,316,418	1,243,680	889,342	
408,762	471,311	418,970	410,390	437,415	529,802	473,341	478,589	23
488,994	562,724	486,205	504,656	521,782	617,674	541,079	579,014	
1,818	82,886	111,423	39,694	4,049,818	4,998,777	5,320,674	1,262,155	24
294	5,580	5,846	2,115	154,439	189,646	191,978	48,873	
1,244,420	726,168	628,290	333,438	3,723,236	3,494,086	2,606,721	1,797,927	25
52,417	34,414	27,561	17,177	146,680	135,945	95,687	65,529	
–	–	379,705	1,301,892	–	–	379,705	1,301,892	26
–	–	418,358	1,468,517	–	–	418,358	1,468,517	
1,607,267	1,443,432	3,017,702	1,484,877	4,479,846	4,399,200	7,887,451	4,421,995	27
87,390	85,210	127,624	59.804	231,792	239,012	340,507	160,701	
5,340,359	7,194,350	7,868,440	7,149,605	5,340,359	7,194,350	7,868,440	7,160,805	28
184,473	202,735	194,795	171,876	184,473	202,735	194,795	172,456	
9,507,411	1,869,063	1,415,844	1,711,592	12,792,632	5,450,840	4,220,377	4,892,493	29
149,727	35,975	32,510	36,290	198,969	87,569	71,598	76,090	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1929.	1930.	1931.	1932.
	VIII. Chemicals and Allied Products—concl.					
	Chemicals, Inorganic, n.o.p.—concluded.					
1	Potash compounds	lb.	485,508	597,321	353,442	431,394
		$	67,500	67,667	60,309	70,678
2	Soda compounds	lb.	22,631,703	39,785,464	17,483,925	17,328,410
		$	554,519	667,520	505,273	527,059
3	Acid phosphate	lb.	73,349	60,907	32,256	77,662
		$	4,425	3,177	2,170	4,717
	Totals, Chemicals, Inorganic, n.o.p.[1]	$	1,148,682	1,339,993	1,246,646	983,682
4	Glycerine	lb.	943,452	2,997,445	1,540,496	513,799
		$	102,469	260,443	139,219	38,910
	Totals, Chemicals and Allied Products[1]	$	**4,963,687**	**5,428,765**	**4,601,666**	**4,096,696**
	IX. Miscellaneous Commodities.					
	Amusement and Sporting Goods—					
5	Films, for motion pictures	ft.	1,184,645	553,084	1,068.543	1,316,449
		$	95,990	44,321	87,778	104,306
6	Toys and dolls	$	301,274	331,142	241,447	188,184
7	Other amusement and sporting goods	$	121.668	147,443	120,066	221,781
8	Brushes	$	185,725	237,188	158,978	123,642
9	Containers	$	2,150,539	2,689,481	1,663,835	1,789,395
	Household and Personal Equipment—					
10	Boots and shoes, with canvas uppers	pr.	1,236	1,971	4,207	496
		$	1,652	1,855	2,216	1,012
11	Boots and shoes, with felt uppers	pr.	421,188	279,109	183,570	85,726
		$	241,206	155,859	99,756	37,700
12	Buttons	$	32,811	32,172	22,479	14,172
13	Combs	$	43,740	52,726	40,319	39,046
14	Jewellery	$	191,045	152,461	112,357	69,234
15	Pocketbooks, etc	$	465,400	454,003	308,238	206,346
16	Refrigerators	No.	1	2	1	1
		$	10	36	97	171
17	Tobacco-pipes	$	325,889	292,365	232,895	160,586
	Totals, Household, etc.[1]	$	1,788,290	1,710,110	1,297,940	876,004
18	Mineral and aerated waters	$	12,882	14,141	15,058	14,487
	Musical Instruments—					
19	Phonographs and parts	$	25,875	17,154	17,640	6,568
20	Other musical instruments	$	66,605	57,012	39,873	29,682
21	Scientific and educational equipment	$	339,232	365,341	357,679	259,425
22	Ships and materials for, n.o.p	$	42,804	259,452	203,548	113,681
23	Vehicles, n.o.p	$	669,992	751,224	315,208	218,887
24	Works of art, n.o.p	$	859,827	899,439	493,021	312,161
	Miscellaneous Imports under Special Conditions—					
25	For army and navy	$	249,319	37,771	70,125	158,757
26	Re-imported	$	242,778	204,985	262,046	186,017
27	For exhibition	$	112,117	164,837	30,243	274,569
28	Ex-warehoused, for ships' stores[2]	$	237,200	239,367	240,467	187,500
	Totals, Miscellaneous Imports under Special Conditions[1]	$	1,041,826	833,253	1,201,569	1,327,939
29	Incubators and brooders	No.	1	4	6	1
		$	337	111	431	387
30	Pencils, lead	$	157,512	193,179	183,298	133,291
31	Precious stones	$	375,458	438,711	162,115	63,677
32	Settlers' effects	$	760,455	820,544	683,250	396,193
33	Waste paper, etc	cwt.	16,655	14,933	25,310	33,762
		$	22,001	26,116	19,256	23,005
34	Wax, vegetable and mineral, n.o.p	lb.	708,041	148,684	336,454	442,064
		$	32,888	9,164	12,536	19,543
	Totals, Miscellaneous Commodities[1]	$	**10,030,226**	**10,934,571**	**8,309,695**	**7,121,815**
	Grand Totals, Imports for Consumption	$	**194,041,381**	**189,179,738**	**149,497,392**	**106,371,779**

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[1] Totals include other items not specified. [2] Exclusive of coal and fuel oil.

Kingdom, United States and All Countries, fiscal years 1929-32—concluded.

United States.				All Countries.				No.
1929.	1930.	1931.	1932.	1929.	1930.	1931.	1932.	
1,273,480	1,063,291	850,626	1,149,956	4,882,191	6,029,521	4,808,202	5,941,534	1
183,876	128,974	95,469	93,877	498,657	539,165	419,869	453,366	
264,733,793	293,633,251	152,438,066	129,015,030	298,171,039	350,146,896	199,502,335	156,207,188	2
2,817,717	3,327,603	2,399,977	2,100,986	3,665,775	4,410,621	3,324,615	2,855,881	
3,078,243	2,945,615	2,343,994	2,440,614	3,151,592	3,006,522	2,376,250	2,518,276	3
234,217	217,029	167,353	189,665	238,642	220,206	169,523	194,382	
5,119,106	5,679,408	5,235,512	5,928,963	7,067,140	8,108,607	7,423,622	7,672,411	
829,118	289,474	103,520	32,405	5,999,890	8,335,339	8,469,197	3,728,177	4
94,751	37,714	12,491	3,758	622,515	717,280	690,066	272,224	
26,202,978	**26,982,460**	**23,201,992**	**20,359,822**	**37,723,046**	**39,907,503**	**35,650,772**	**30,731,345**	
9,413,846	19,303,529	15,046,579	8,315,774	10,630,282	19,887,857	16,572,390	10,477,240	5
769,402	1,558,117	1,232,028	706,918	868,163	1,604,898	1,356,224	877,981	
1,095,592	1,077,504	830,634	572,500	2,606,890	2,691,408	1,981,455	1,494,839	6
640,309	1,412,761	877,894	429,251	889,905	1,634,982	1,066,776	982,793	7
286,880	327,546	194,659	107,531	686,056	849,226	556,179	374,999	8
2,045,029	2,223,764	990,145	590,118	5,479,789	6,285,755	3,826,939	3,349,679	9
106,826	56,755	12,005	11,409	108,066	58,930	18,573	90,311	10
64,546	39,577	12,936	8,436	66,199	41,659	16,255	30,565	
86,882	75,204	46,449	32,159	531,970	374,187	243,341	124,440	11
52,147	45,880	27,255	15,670	311,961	219,513	132,933	55,385	
245,188	192,514	155,562	111,057	531,755	514,537	417,318	254,936	12
32,346	30,050	25,537	14,814	249,421	258,391	211,423	161,599	13
1,407,889	1,336,677	893,514	500,183	2,605,322	2,435,869	1,657,303	1,091,547	14
457,189	451,632	314,312	220,978	1,288,276	1,343,761	961,048	650,261	15
10,855	18,892	17,306	16,593	10,857	18,894	17,307	16,596	16
1,319,011	1,913,555	2,377,573	2,156,450	1,319,180	1,913,591	2,377,670	2,156,831	
33,313	25,871	22,732	17,885	714,760	627,678	627,577	398,859	17
5,348,148	6,053,288	5,412,719	4,441,777	9,787,190	10,364,108	8,771,595	6,778,253	
74,956	79,479	64,749	44,374	223,845	241,719	193,063	152,418	18
1,250,085	1,541,385	727,165	179,174	1,327,915	1,597,821	758,623	188,612	19
1,022,843	1,093,393	601,703	300,014	1,498,312	1,533,052	864,414	482,358	20
3,696,677	4,080,874	3,275,052	2,576,145	4,516,549	5,045,128	4,114,019	3,323,829	21
847,770	1,044,833	542,792	215,186	1,056,163	1,372,046	827,842	333,957	22
2,642,720	2,396,569	1,297,370	476,940	3,344,764	3,249,798	1,665,625	790,503	23
1,139,656	561,735	1,018,471	358,471	2,384,998	1,909,505	1,764,240	879,265	24
5,657	1,024	171	2,059	273,899	47,172	73,676	161,296	25
2,581,163	2,539,217	2,824,340	1,468,598	3,213,565	2,925,907	4,140,698	1,968,251	26
3,130,350	3,201,979	4,656,760	2,254,076	3,295,342	3,487,016	4,697,115	2,540,780	27
173,561	211,224	196,985	147,167	490,917	519,630	482,598	361,417	28
9,060,691	10,510,354	9,775,719	5,185,801	11,295,210	12,011,104	12,879,847	7,186,290	
24,253	23,658	10,170	589	24,255	23,662	10,176	590	29
450,584	498,398	216,274	35,462	451,037	498,509	216,818	35,849	
561,198	504,778	422,827	309,014	933,553	938,806	836,142	644,768	30
85,953	61,801	64,894	41,653	837,477	810,466	443,855	210,047	31
9,343,313	10,113,018	10,568,690	7,595,152	10,390,922	11,181,203	11,489,320	8,262,445	32
724,644	1,028,727	817,213	1,047,089	754,889	1,049,075	857,720	1,081,853	33
773,638	559,069	364,061	499,016	804,925	600,767	407,328	525,758	
699,462	802,050	927,086	658,923	2,921,307	2,951,130	2,820,178	2,773,819	34
140,027	133,172	122,671	82,282	255,137	253,050	205,959	162,946	
48,665,915	**53,415,103**	**45,268,509**	**39,131,580**	**68,492,863**	**73,986,767**	**62,471,220**	**43,454,205**	
868,012,229	**847,442,037**	**584,407,018**	**351,686,775**	**1,265,679,091**	**1,248,273,582**	**906,612,695**	**578,503,904**	

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, during the fiscal years ended Mar. 31, 1928-32.

Class.	1928.	1929.	1930.	1931.	1932.
IMPORTS.	$	$	$	$	$
Agricultural and Vegetable Products (except chemicals, fibres and wood).					
Dutiable	153,762,736	153,519,512	152,962,368	111,519,698	93,328,790
Free	84,422,824	79,610,732	74,086,449	66,109,080	35,292,470
Totals for Group	**238,185,560**	**233,130,244**	**227,048,817**	**177,628,778**	**128,621,260**
Animals and Animal Products (except chemicals and fibres).					
Dutiable	30,002,698	36,074,696	44,479,161	28,062,640	13,471,114
Free	35,787,323	35,587,058	25,374,672	17,933,065	11,092,132
Totals for Group	**65,790,021**	**71,661,754**	**69,853,833**	**45,995,705**	**24,563,246**
Fibres, Textiles and Textile Products.					
Dutiable	127,163,911	130,364,826	121,103,721	87,763,168	52,367,785
Free	59,830,551	76,074,347	64,137,531	42,953,854	31,511,577
Totals for Group	**186,994,462**	**206,439,173**	**185,241,252**	**130,717,022**	**83,879,362**
Wood, Wood Products and Paper.					
Dutiable	31,819,999	37,321,028	39,108,066	30,215,278	21,431,905
Free	19,930,925	21,893,790	21,843,011	15,826,751	10,576,263
Totals for Group	**51,750,924**	**59,214,818**	**60,951,077**	**46,042,029**	**32,008,168**
Iron and Its Products.					
Dutiable	215,628,798	288,130,876	263,630,457	160,775,734	85,009,853
Free	42,565,823	57,063,721	50,736,334	33,157,743	13,801,853
Totals for Group	**258,194,621**	**345,194,597**	**314,366,791**	**193,933,477**	**98,811,706**
Non-Ferrous Metals and Their Products.					
Dutiable	39,429,966	53,215,663	66,212,004	45,928,500	26,212,301
Free	22,134,572	23,642,702	24,209,150	14,666,534	8,088,804
Totals for Group	**61,564,538**	**76,858,365**	**90,421,154**	**60,595,034**	**34,301,105**
Non-Metallic Minerals and Their Products (except chemicals).					
Dutiable	60,219,594	64,022,829	69,259,471	59,901,380	57,382,379
Free	92,829,844	102,941,402	117,236,917	93,677,278	44,764,968
Totals for Group	**153,049,438**	**166,964,231**	**186,496,388**	**153,578,658**	**102,147,347**
Chemicals and Allied Products.					
Dutiable	17,842,190	19,271,781	20,555,008	18,641,318	17,197,862
Free	15,729,923	18,451,265	19,352,495	17,009,454	13,533,483
Totals for Group	**33,572,113**	**37,723,046**	**39,907,503**	**35,650,772**	**30,731,545**
Miscellaneous Commodities.					
Dutiable	34,180,336	39,154,219	41,920,218	31,282,514	22,096,059
Free	25,674,453	29,338,644	32,066,549	31,188,706	21,344,306
Totals for Group	**59,854,789**	**68,492,863**	**73,986,767**	**62,471,220**	**43,440,365**
Total Imports.					
Dutiable	710,050,228	821,075,430	819,230,474	574,090,230	388,498,048
Free	398,906,238	444,603,661	429,043,108	332,522,465	190,005,856
Totals, Imports	**1,108,956,466**	**1,265,679,091**	**1,248,273,582**	**906,612,695**	**578,503,904**
Duty Collected	**171,872,768**	**200,479,505**	**199,011,628**	**149,250,992**	**113,997,851**

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, during the fiscal years ended Mar. 31, 1928-32—concluded.

Class.	1928.	1929.	1930.	1931.	1932.
EXPORTS.	$	$	$	$	$
Agricultural and Vegetable Products (except chemicals, fibres and wood).					
Canadian produce	555,110,598	646,514,058	384,635,751	292,280,037	204,398,365
Foreign produce	8,837,492	10,453,444	8,061,858	2,540,500	1,499,705
Totals for Group	**563,948,090**	**656,967,502**	**392,697,609**	**294,820,537**	**205,898,070**
Animal and Animal Products (except chemicals and fibres).					
Canadian produce	165,845,096	158,757,272	133,009,145	83,714,772	68,798,683
Foreign produce	1,915,046	1,736,561	1,367,215	1,041,519	672,339
Totals for Group	**167,760,142**	**160,493,833**	**134,376,360**	**84,756,291**	**69,471,022**
Fibres, Textiles and Textile Products.					
Canadian produce	10,904,073	9,678,019	9,066,226	6,504,182	5,512,130
Foreign produce	1,808,756	1,755,418	1,481,775	1,397,693	755,397
Totals for Group	**12,712,829**	**11,433,437**	**10,548,001**	**7,901,875**	**6,267,527**
Wood, Wood Products and Paper.					
Canadian produce	284,543,396	288,621,745	289,566,675	230,604,474	175,740,269
Foreign produce	44,119	335,898	401,708	502,618	322,358
Totals for Group	**284,987,515**	**288,957,643**	**289,968,383**	**231,107,092**	**176,062,627**
Iron and Its Products.					
Canadian produce	62,753,934	82,256,717	78,589,580	38,937,661	15,462,977
Foreign produce	3,301,107	4,277,189	4,790,770	3,713,065	2,962,695
Totals for Group	**66,055,041**	**86,533,906**	**83,380,350**	**42,650,726**	**18,425,672**
Non-Ferrous Metals and Their Products.					
Canadian produce	90,840,441	112,778,194	154,319,429	95,652,063	69,072,888
Foreign produce	696,055	773,267	1,178,770	1,346,992	616,070
Totals for Group	**91,536,496**	**113,551,461**	**155,498,199**	**96,999,055**	**69,688,958**
Non-Metallic Minerals and Their Products (except chemicals).					
Canadian produce	25,949,930	27,401,790	28.545,096	21,107,780	13,456,701
Foreign produce	891,287	1,377,751	1,288,495	950,695	662,479
Totals for Group	**26,841,217**	**28,779,541**	**29,833,591**	**22,058,475**	**14,119,180**
Chemicals and Allied Products.					
Canadian produce	17,365,516	19,438,064	22,468,462	12,825,852	10,535,038
Foreign produce	422,818	384,805	563,645	582,491	294,047
Totals for Group	**17,788,334**	**19,822,869**	**23,032,107**	**13,408,343**	**10,829,085**
Miscellaneous Commodities.					
Canadian produce	15,036,359	18,263,813	20,057,938	18,115,846	13,367,251
Foreign produce	3,932,011	4,092,070	5,545,532	5,209,808	3,436,125
Totals for Group	**18,968,370**	**22,355,883**	**25,603,470**	**23,325,654**	**16,803,376**
Total Exports.					
Canadian produce	1,228,349,343	1,363,709,672	1,120,258,302	799,742,667	576,344,302
Foreign produce	22,248,691	25,186,403	24,679,768	17,285,381	11,221,215
Total, Exports	**1,150,598,034**	**1,388,896,075**	**1,144,938,070**	**817,028,048**	**587,565,517**
Total Trade.					
Imports, merchandise	1,108,956,466	1,265,679,091	1,248,273.582	906,612,695	578,503,904
Exports, merchandise	1,250,598,034	1,388,896,075	1,144,938,070	817,028,048	587,565,517
Totals, External Trade	**2,359,554,500**	**2,654,575,166**	**2,393,211,652**	**1,723,640,743**	**1,166,069,421**

15.—External Trade of Canada, by Main Groups and Degree of Manufacture, According to Origin, fiscal year ended Mar. 31, 1932.

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Farm Origin—						
1.—Canadian Farm Products[1]—						
Field Crops—						
Raw materials	397,924	15,377,753	21,808,014	80,437,435	7,686,030	149,588,741
Partly manufactured	24,106	199,727	342,697	673	1,003,681	1,218,797
Fully or chiefly manufactured	22,350,977	4,288,648	30,663,137	14,769,765	2,078,135	41,578,426
Totals, Canadian Field Crops	22,773,007	19,866,128	52,813,848	95,207,873	10,767,846	192,385,964
Animal Husbandry—						
Raw materials	1,529,251	4,078,128	7,798,332	3,226,000	4,717,558	9,560,147
Partly manufactured	2,798,216	3,455,763	7,862,989	1,571,377	1,022,326	3,030,379
Fully of chiefly manufactured	12,708,365	3,152,194	22,333,856	15,539,042	1,410,038	19,788,630
Totals, Canadian Animal Husbandry	17,035,832	10,686,085	37,995,177	20,336,419	7,149,922	32,379,156
All Canadian Farm Products—						
Raw materials	1,927,175	19,455,881	29,606,346	83,663,435	12,403,588	159,148,888
Partly manufactured	2,822,322	3,655,490	8,205,686	1,572,050	2,026,007	4,249,176
Fully or chiefly manufactured	35,059,342	7,440,842	52,996,993	30,308,807	3,488,173	61,367,056
Totals, Canadian Farm Products	**39,808,839**	**30,552,213**	**90,809,025**	**115,544,292**	**17,917,768**	**224,765,120**
2.—Foreign Farm Products[1]—						
Field Crops—						
Raw materials	906,328	24,002,509	34,025,370	-	490	1,857
Partly manufactured	657,873	4,126,814	26,137,041	-	51,699	57,825
Fully or chiefly manufactured	17,380,327	14,670,251	53,661,393	4,110,702	1,130,878	14,224,161
Totals, Foreign Field Crops	18,944,528	42,799,574	113,823,804	4,110,702	1,183,067	14,283,843
Animal Husbandry—						
Raw materials	145,086	5,498,285	6,946,486	-	-	-
Partly manufactured	5,782	70,307	104,523	-	-	-
Fully or chiefly manufactured	445,266	2,389,196	6,490,142	1,462	2,847	54,351
Totals, Foreign Animal Husbandry	596,134	7,957,788	13,541,151	1,462	2,847	54,351
All Foreign Farm Products—						
Raw materials	1,051,414	29,500,794	40,971,856	-	490	1,857
Partly manufactured	663,655	4,197,121	26,241,564	-	51,699	57,825
Fully or chiefly manufactured	17,825,593	17,059,447	60,151,535	4,112,164	1,133,725	14,278,512
Totals, Foreign Farm Products	**19,540,662**	**50,757,362**	**127,364,955**	**4,112,164**	**1,185,914**	**14,338,194**
3.—All Farm Products—						
All Field Crops—						
Raw materials	1,304,252	39,380,262	55,833,384	80,437,435	7,686,520	149,590,598
Partly manufactured	681,979	4,326,541	26,479,738	673	1,055,380	1,276,622
Fully or chiefly manufactured	39,731,304	18,958,899	84,324,530	18,880,467	3,209,013	55,802,587
Totals, All Field Crops	41,717,535	62,665,702	166,637,652	99,318,575	11,950,913	206,669,807

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[1] In this classification the expression "Canadian Farm Products" refers, in the case of exports, to commodities actually produced, in their original state, on Canadian farms. In the case of imports, it covers all commodities of which the basic raw materials are such as Canadian farms produce. "Foreign Farm Products" covers, in both imports and exports, materials or commodities such as Canada does not produce in their original forms, *e.g.*, cane sugar, tea, rubber, cotton, silk, etc.

15.—External Trade of Canada, by Main Groups and Degree of Manufacture, According to Origin, fiscal year ended Mar. 31, 1932—concluded.

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Farm Origin—concluded.						
3.—All Farm Prod'ts-concl.						
All Animal Husbandry—						
Raw materials	1,674,337	9,576,413	14,744,818	3,226,000	4,717,558	9,560,147
Partly manufactured	2,803,998	3,526,070	7,967,512	1,571,377	1,022,326	3,030,379
Fully or chiefly manufactured	13,153,631	5,541,390	28,823,998	15,540,504	1,412,885	19,842,981
Totals, All Animal Husbandry	17,631,966	18,643,873	51,536,328	20,337,881	7,152,769	32,433,507
All Farm Products—						
Raw materials	2,978,589	48,956,675	70,578,202	83,663,435	12,404,078	159,150,745
Partly manufactured	3,485,977	7,852,611	34,447,250	1,572,050	2,077,706	4,307,001
Fully or chiefly manufactured	52,884,935	24,500,289	113,148,528	34,420,971	4,621,898	75,645,568
Totals, Farm Origin	**59,349,501**	**81,309,575**	**218,173,980**	**119,656,456**	**19,103,682**	**239,103,314**
Wild Life Origin—						
Raw materials	105,618	2,409,325	2,699,677	6,512,976	4,385,636	12,212,549
Partly manufactured	35,199	735,651	1,194,670	3,467	19,974	51,789
Fully or chiefly manufactured	77,436	140,501	260,979	7,699	43,427	56,153
Totals, Wild Life Origin	**218,253**	**3,285,477**	**4,155,326**	**6,524,142**	**4,449,037**	**12,320,491**
Marine Origin—						
Raw materials	8,134	457,371	734,874	467,909	7,948,044	8,776,415
Partly manufactured	-	-	-	-	-	-
Fully or chiefly manufactured	167,723	407,834	1,674,264	5,040,721	3,113,949	16,109,954
Totals, Marine Origin	**175,857**	**865,205**	**2,409,138**	**5,508,630**	**11,061,993**	**24,886,369**
Forest Origin—						
Raw materials	1,439	857,689	974,418	186,234	5,912,314	7,239,924
Partly manufactured	12,066	6,009,810	6,066,940	6,300,486	39,847,155	56,064,289
Fully or chiefly manufactured	3,832,989	20,478,012	26,874,546	7,325,200	94,720,668	112,548,812
Totals, Forest Origin	**3,846,494**	**27,345,511**	**33,915,904**	**13,811,920**	**140,480,137**	**175,853,025**
Mineral Origin—						
Raw materials	5,257,999	55,598,328	70,615,329	6,334,922	22,426,666	33,062,391
Partly manufactured	516,114	4,359,896	5,393,854	8,714,451	12,087,174	31,641,845
Fully or chiefly manufactured	23,990,535	136,976,692	175,837,723	8,427,338	16,602,646	40,870,594
Totals, Mineral Origin	**29,764,648**	**196,934,916**	**251,846,906**	**23,476,711**	**51,116,486**	**105,574,830**
Mixed Origin—						
Raw materials	-	-	-	-	-	-
Partly manufactured	138,915	961,024	1,289,847	105,499	214,474	331,481
Fully or chiefly manufactured	12,878,111	40,985,067	66,712,803	4,960,367	8,760,865	18,274,792
Totals, Mixed Origin	**13,017,026**	**41,946,091**	**68,002,650**	**5,065,866**	**8,975,339**	**18,606,273**
Recapitulation—						
Raw materials	8,351,779	108,279,388	145,602,500	97,165,476	53,076,738	220,442,024
Partly manufactured	4,188,271	19,918,992	48,392,561	16,695,953	54,246,483	92,396,405
Fully or chiefly manufactured	93,831,729	223,488,395	384,508,843	60,182,296	127,863,453	263,505,873
Grand Totals	**106,371,779**	**351,686,775**	**578,503,904**	**174,043,725**	**235,186,674**	**576,344,302**

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1932.

Group.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Foods, Beverages and Smokers' Supplies.	**29,742,365**	**29,919,782**	**113,955,928**	**112,184,969**	**18,944,635**	**221,997,876**
Foods	3,409,592	28,865,970	74,278,488	111,932,527	18,925,095	210,028,324
Animals for food	10	16,555	16,585	2,165,423	374,974	2,733,031
Breadstuffs	319,064	3,130,463	7,106,527	80,218,926	2,872,190	147,113,774
Grains	62,657	2,351,418	6,006,735	68,305,053	2,792,597	122,927,518
Flour and other milled products	33,614	388,442	450,370	9,542,184	7,706	21,608,308
Flour and meal	20,480	387,872	436,666	9,542,184	7,706	21,608,308
Other milled products	13,134	570	13,704	–	–	–
Bakery products and prepared foods	222,793	390,603	649,422	2,371,689	71,887	2,577,948
Other farinaceous substances	11,408	187,523	319,779	–	–	–
Cocoa and chocolate	107,638	179,200	1,534,186	–	–	–
Fish	161,980	560,165	1,846,587	5,478,751	10,130,494	23,596,192
Fresh or frozen	1,274	340,071	506,036	456,554	7,850,402	8,605,189
Dried, salted, smoked or pickled	101,665	43,233	464,460	16,931	1,135,089	5,445,514
Canned or otherwise preserved	59,041	176,861	876,091	5,005,266	1,145,003	9,545,489
Fruits	521,146	15,318,961	22,240,109	6,018,609	317,020	7,309,898
Fresh	121,139	12,805,589	15,405,008	5,620,618	304,743	6,825,305
Dried	302,087	2,101,980	4,930,373	5,874	–	52,780
Canned or otherwise preserved	97,920	411,392	1,904,728	392,117	12,277	431,813
Meats	167,608	760,555	1,689,749	2,818,472	1,010,888	4,960,816
Lard, lard compound and substitutes	1,690	15,389	27,806	406,231	14,349	541,726
Milk and its products	20,986	125,276	726,136	12,410,749	660,462	15,118,038
Milk and cream, fresh	–	14,009	14,009	–	181,091	181,091
Milk preparations and products	20,986	111,267	712,127	12,410,749	479,371	14,936,947
Nuts	104,395	906,100	3,646,143	2,534	6,818	10,073
Oils	316,708	584,770	2,541,731	–	–	–
Salt	221,030	379,586	730,400	–	12,351	48,239
Spices	422,648	109,713	863,079	–	–	–
Sugar and sugar products	479,069	562,410	22,398,080	104,987	677,462	1,753,174
Vegetables	258,438	5,151,969	6,744,759	1,966,655	2,406,728	5,554,068
Vinegar	7,323	89,151	101,686	–	14,524	15,569
Yeast	5,989	293,896	304,826	–	–	–
Other articles of food	282,462	494,288	1,440,320	341,190	426,835	1,273,726
Beverages and infusions	25,522,662	827,475	37,796,499	252,206	12,281	11,892,237
Beverages, alcoholic	21,694,549	545	25,929,880	73,320	–	11,666,339
Beverages, non-alcoholic	38,003	229,969	388,541	178,886	8,856	212,236
Lime and other fruit juices	23,516	185,595	236,123	175,758	2,603	197,142
Mineral waters	14,487	44,374	152,418	3,128	6,253	15,094
Infusions	3,790,110	596,961	11,478,078	–	3,425	13,662
Cocoa and chocolate	8,009	91,171	163,165	–	–	–
Coffee and chicory	498,371	492,600	4,189,599	–	3,425	13,662
Tea	3,283,730	13,190	7,125,314	–	–	–
Smokers' supplies	810,111	226,337	1,880,941	236	7,259	77,315
Tobacco, manufactured	515,777	175,437	770,087	236	7,259	77,315
Other smokers' supplies	294,334	50,900	1,110,854	–	–	–
Personal and Household Utilities.	**16,223,240**	**29,759,899**	**59,905,704**	**7,454,532**	**2,413,802**	**15,897,958**
Books, printed matter, stationery and educational supplies	2,954,262	10,964,048	15,255,472	554,361	574,849	1,436,698
Books, pamphlets, printed matter and maps	2,045,552	8,409,718	10,973,042	124,576	443,484	729,320
Books	1,718,894	2,820,466	4,973,274	23,873	102,843	162,746
Charts and maps	12,400	38,352	52,142	–	–	–
Newspapers	77,760	3,687,951	3,778,327	–	–	–
Printed matter, n.o.p.	236,498	1,862,949	2,169,299	100,703	340,641	566,574
Stationery	421,587	1,050,238	1,829,049	394,581	49,324	580,651
Educational equipment (except text books)	107,690	618,015	907,826	8,855	12,032	25,366
Works of art	379,433	886,077	1,545,555	26,349	70,009	101,361

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1932—continued.

Group.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
Personal and Household Utilities—concluded.	$	$	$	$	$	$
Clothing	4,682,109	3,899,762	13,534,716	2,115,058	124,251	5,280,175
Blouses and shirtwaists	246	13,213	21,762	–	–	–
Boots and shoes (excluding materials)	498,013	932,640	1,585,310	1,831,623	29,529	3,664,258
Gloves and mitts	325,461	51,237	2,528,361	129,247	5,544	171,376
Handkerchiefs	689,461	13,061	1,084,943	–	–	–
Hats and caps (excluding materials)	311,260	430,370	1,396,497	–	912	32,075
Hosiery	775,104	33,661	855,792	88,161	1,348	766,402
Shirts	9,473	26,297	37,453	–	237	–
Underwear	246,682	26,302	348,547	24,889	–	109,098
Miscellaneous clothing	1,826,409	2,372,981	5,676,051	41,138	86,681	536,966
Household utilities	6,699,456	9,956,087	19,913,361	2,626,343	160,529	4,345,408
Bedding	563,201	73,014	859,473	–	346	28,699
Cutlery	185,994	76,227	349,015	–	–	–
Floor coverings	512,645	83,418	990,433	1,301	4,436	44,541
Wool carpets	288,926	29,890	617,253	802	4,355	10,778
Other floor coverings	223,719	53,528	373,180	499	81	33,763
Furniture	185,593	1,118,384	1,449,567	83,045	30,183	315,660
Glassware, chinaware and pottery	2,563,290	693,303	4,347,840	854	28,812	36,325
Glassware	50,670	502,163	792,095	–	–	–
Chinaware and pottery	2,512,620	191,140	3,555,745	854	28,812	36,325
Household linen	1,296,101	186,376	1,927,420	–	–	–
Household machinery	80,531	1,715,003	1,810,018	1,995,923	3,842	2,837,560
Kitchen equipment	208,084	4,172,793	4,515,280	32,290	14,896	158,598
Soap	103,291	655,040	887,710	421,860	871	591,710
Window curtains and fixtures	206,266	163,490	515,943	–	–	–
Miscellaneous household utilities	794,460	1,019,039	2,260,662	91,070	77,143	332,315
Jewellery, personal ornaments and timepieces	363,218	1,194,259	3,904,945	48,267	5,165	135,715
Jewellery and personal ornaments	321,637	586,597	2,141,182	1,373	1,691	9,608
Timepieces	41,581	607,662	1,763,763	46,894	3,474	126,107
Personal utilities	705,454	1,205,067	2,927,589	100	30	17,227
Toilet articles	385,413	806,633	1,864,870	100	30	17,227
Other personal utilities	320,041	398,434	1,062,719	–	–	–
Recreation equipment and supplies	818,741	2,540,676	4,369,621	2,110,403	1,548,978	4,682,735
Musical instruments and accessories	76,184	733,097	966,820	5,407	104,315	149,481
Picture machines and accessories	105,052	814,531	998,215	2,070,656	992,713	4,011,672
Equipment for indoor games	80,102	59,248	149,701	–	–	–
Miscellaneous articles for amusement	557,403	933,800	2,254,885	34,340	451,950	521,582
Electrical Energy.	–	**90,381**	**90,381**	–	**2,706,661**	**2,710,410**
Electrical energy	–	90,381	90,381	–	2,706,661	2,710,410
Electrical Equipment.	**1,667,956**	**13,424,038**	**15,539,703**	**395,354**	**1,285,553**	**3,022,491**
Batteries	185,561	349,975	538,243	732	2,228	165,899
Dynamos and motors	540,731	1,752,142	2,428,365	3,328	3,603	14,287
Lighting equipment	21,954	929,243	1,069,212	–	–	–
Transmission equipment	3,317	86,437	90,097	–	1,236,350	1,318,752
Other electric apparatus	916,393	10,306,241	11,413,786	391,294	43,372	1,523,553
Producers' Equipment.	**12,504,069**	**80,385,941**	**99,366,515**	**1,475,853**	**6,003,556**	**13,785,162**
Abrasives	103,990	926,394	1,073,813	113,192	1,415,535	1,546,532
Containers, wrapping and packing materials	2,231,991	4,224,379	8,108,383	236,495	137,835	1,685,789
Bags and sacks	104,241	333,201	467,816	37,779	1,166	160,575
Barrels	82	147,538	149,651	–	13,074	60,426
Cordage (except binder twine)	21,776	46,555	74,463	8,509	2,698	38,661
Wrapping paper	111,766	526,524	825,955	182,887	22,942	1,064,923
Miscellaneous containers, etc	1,994,126	3,170,561	6,590,498	7,320	97,955	361,204

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1932—continued.

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Producers' Equipment— concluded.						
Farm equipment	378,849	3,759,463	5,233,497	352,949	2,355,867	4,233,387
Agricultural implements and machinery	118,128	3,101,171	3,377,365	315,136	802,288	2,493,739
Dairying equipment	44,146	544,581	709,214	385	92,183	95,828
Engines for farm purposes	17,314	932,474	963,217	–	8,276	8,774
Planting and tillage implements	1,665	106,493	109,441	33,682	176,052	561,861
Harvesting equipment	6,533	137,178	153,559	83,321	177,682	617,255
Seed separation machinery	310	89,071	89,492	450	169,191	236,015
Other agricultural implements and machinery and parts of	48,160	1,291,374	1,352,442	197,298	178,904	974,006
Animals (except animals for food)	91,782	286,542	427,325	14,724	1,267,507	1,395,489
Animals for improvement of stock	71,761	113,344	195,594	13,145	619,456	673,650
Other animals	20,021	173,198	231,731	1,579	648,051	721,839
Fencing materials	78,330	145,343	319,225	22,561	275,300	319,397
Harness and horse equipment	29,988	28,972	60,967	139	1,430	4,109
Plants, trees and shrubs	60,234	161,973	1,012,766	389	9,342	20,653
Miscellaneous farm equipment	387	35,462	35,849	–	–	–
Industrial equipment	4,255,501	23,969,579	29,332,842	690,518	414,875	2,274,264
Fisheries equipment	609,934	397,543	1,138,050	–	32,696	43,834
Industrial and trade machinery (except mining, electrical and printing machinery, boilers and engines)	2,011,806	15,204,297	17,628,771	477,515	329,830	1,570,138
Construction machinery	12,287	656,349	671,757	–	195,717	201,451
Office or business machinery and accessories	18,224	1,310,460	1,337,539	141,092	2,260	177,132
Metal-working machinery	288,505	2,533,645	2,867,746	–	–	–
Pulp and paper-making machinery and accessories	4,803	299,302	310,789	149,849	2,543	545,279
Textile and cordage machinery	834,375	2,664,546	3,607,460	–	–	–
Other industrial machinery	853,612	7,739,995	8,833,480	186,574	129,310	646,276
Mining and metallurgical equipment	411,370	2,015,776	2,478,450	–	–	–
Printing equipment	255,834	2,843,974	3,253,686	4,143	7,817	14,134
Photographic equipment	34,675	583,282	699,864	1,609	1,157	13,777
Tools, n.o.p	186,221	708,723	1,078,492	28,715	13,204	107,765
Transmission equipment (except electrical)	110,582	268,602	380,470	65,239	2,349	262,962
Miscellaneous industrial equipment	635,079	1,947,382	2,675,059	113,297	27,822	261,654
Light, heat and power equipment and supplies (except electrical and transportation)	5,381,528	44,072,740	52,024,752	69,098	1,545,834	3,842,778
Boilers and engines (except for farms)	252,172	1,285,064	1,623,714	339	15,780	53,887
Fuel	5,111,245	41,959,501	49,399,847	48,954	1,515,332	3,245,599
Coal	5,094,369	30,123,108	35,501,362	48,954	732,878	1,872,200
Fuel oils	381	8,602,172	10,645,463	–	267,206	853,800
Other fuels	16,495	3,234,221	3,253,022	–	515,248	519,599
Illuminants	1,690	286,747	312,042	6,556	14,110	510,346
Other light, heat and power equipment	16,421	541,428	689,149	13,249	612	32,946
Lubricating oils and greases	152,210	3,433,386	3,593,228	13,601	133,610	202,412

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1932—continued.

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Producers' Materials.	**38,204,261**	**128,451,919**	**206,250,881**	**46,904,214**	**198,375,597**	**295,663,658**
Building and construction materials	2,256,512	12,990,665	17,563,008	4,545,894	17,675,234	28,656,624
Asphalt and its products	60	552,717	553,751	–	–	–
Brick and tile	442,781	1,372,308	2,021,388	18	36,949	46,037
Cement, lime and plaster	56,422	200,250	261,492	1,101	279,423	409,885
Glass for building	330,732	197,032	1,403,427	–	–	–
Structural iron	322,618	2,705,582	3,341,324	2,640	–	42,906
Iron piping	149,852	727,857	935,929	65,974	416,277	1,112,071
Nails	672	17,729	46,571	2,298	2,407	102,819
Lumber and timber	1,819	2,735,895	2,753,122	3,764,275	16,155,985	24,648,557
Paints and painters' materials	592,037	2,158,141	3,159,394	127,154	50,199	336,010
Paints and varnishes	84,279	344,331	442,317	101,894	4,746	251,023
Painters' materials	507,758	1,813,810	2,717,077	25,260	45,453	84,987
Stone, marble and slate	52,381	378,313	665,786	53	198,039	200,142
Railway materials	14,904	819,761	841,695	49,324	376,413	692,639
Miscellaneous construction materials	292,234	1,125,080	1,579,129	533,057	159,542	1,065,558
Farm materials	502,298	3,382,603	7,393,571	4,636,804	5,263,906	18,223,939
Fertilizers	30,211	1,927,578	3,549,316	2,550	2,207,600	2,668,519
Fodders	1,157	248,395	253,231	3,514,677	2,060,885	13,205,778
Seeds	146,714	828,155	1,594,764	686,466	71,032	850,276
Miscellaneous farm materials	324,216	378,475	1,996,260	433,111	924,389	1,499,366
Manufacturers' materials	35,445,451	112,078,651	181,294,302	37,721,516	175,436,457	248,783,095
For explosives and ammunition	44,468	96,786	355,022	–	–	–
For textiles, clothing and cordage	21,930,557	24,301,362	62,068,341	381,886	200,416	1,000,045
Fibres for spinning or cordage manufacture	3,642,699	15,623,968	22,383,116	331,346	187,225	544,053
Yarn for weaving or knitting	3,800,469	1,498,355	6,132,531	–	–	–
Piece goods for clothing	13,658,605	5,517,091	29,711,558	2,497	4,705	62,705
Thread for sewing	463,007	294,579	910,224	–	–	–
Buttons and materials for (except shoe buttons)	13,400	131,913	298,969	10,143	83	10,248
Corset materials	7,800	48,654	56,454	–	–	–
Hat materials	113,767	652,131	1,602,067	–	–	–
Other textile, clothing and cordage materials	230,810	534,671	973,422	37,900	8,403	383,039
For dyeing and tanning	276,084	2,027,102	3,463,461	–	3,039	3,039
For fur and leather goods	826,867	7,484,295	10,496,932	8,122,872	6,824,176	16,901,875
Furs	274,614	3,569,440	4,515,296	6,514,004	4,317,974	12,161,946
Hides	14,223	1,582,401	2,867,945	37,491	1,506,506	1,751,443
Leather	530,483	2,115,121	2,868,887	1,571,377	999,696	2,988,486
Other materials	7,547	217,333	244,804	–	–	–
For smelters and metal refineries	299,014	4,660,355	5,912,898	7,285,730	19,663,470	29,062,382
For foundries	122,665	686,166	925,596	5,119,758	1,689,926	11,586,656
For machinery, implements, tools and cutlery	25,472	764,031	843,565	52,295	5,521	81,916
For electrical goods	9,610	893,903	923,992	–	–	–
For furniture and wood wares	10,926	2,395,951	2,441,371	669,266	26,872	1,071,695
Cabinet woods	9,231	1,754,643	1,773,598	71,686	2,895	76,847
Other materials	1,695	641,308	667,773	597,580	23,977	994,848
For musical instruments	6,463	18,459	27,063	1,406	241	25,469
For wood-pulp	52,436	2,823,870	2,882,957	–	8,196,144	8,196,144
For paper-making	15,981	715,242	750,652	1,529,658	21,755,915	28,139,799
For paper goods, printing and bookbinding	302,246	2,246,485	2,627,830	5,892,869	89,865,544	104,233,449
For rubber working industries	35,974	4,236,205	4,370,535	–	37,456	42,306
For vehicles (not including complete parts)	161,239	791,122	952,438	–	–	–
For vessels	345,161	333,109	697,439	–	10,520	13,304
Other materials for chemical-using industries	955,567	4,988,000	7,081,730	1,483,950	2,284,023	5,595,818

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1932—concluded.

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
Producers' Materials–con.	$	$	$	$	$	$
Other materials for metal-working industries......	7,647,012	14,807,515	23,712,793	3,580,933	15,916,444	26,741,069
Other materials for wood-using industries.........	80	115,702	213,121	628,399	1,654,781	3,446,657
Other manufacturers' materials..................	2,377,629	37,692,991	50,546,566	2,972,494	7,301,969	12,641,472
Transportation.	**1,017,548**	**25,234,801**	**26,451,132**	**196,600**	**453,614**	**10,130,401**
Vehicles....................	964,738	24,785,035	25,940,945	191,158	312,375	9,617,723
Automobiles and parts....	443,401	22,882,237	23,395,945	163,156	210,509	4,331,473
Other motor vehicles, not for railways............	124,160	232,104	357,314	650	100	1,408
Bicycles and tricycles.....	79,020	27,964	115,999	50	552	3,076
Railway rolling stock.....	24,054	493,524	518,403	–	59,530	79,164
Locomotives............	168	191,228	191,396	–	45,334	52,745
Motor cars..............	7,614	18,493	26,107	–	14,196	26,419
Other cars..............	16,272	283,803	300,900			
Other vehicles............	273,154	855,337	1,230,494	12,415	5,780	49,988
Rubber tires..............	20,949	293,869	322,790	14,887	35,904	5,152,614
Vessels....................	52,810	449,766	510,187	5,442	141,239	512,678
Ships and boats.........	26,859	212,213	243,495	5,442	141,239	512,678
Equipment for ships....	25,951	237,553	266,692	–	–	–
Medical Supplies.	**1,128,039**	**4,140,656**	**6,551,542**	**285,970**	**235,116**	**822,412**
Alkaloids and their salts....	75,242	70,661	264,307	–	–	–
Biological medicines........	3,499	149,839	163,582	–	–	–
Drugs, crude................	9,150	106,483	161,653	23,068	128,584	252,574
Medicinal and pharmaceutical preparations.........	727,375	1,400,263	2,815,009	262,902	9,097	471,086
Oils and gums, chiefly for medicinal use............	72,296	90,935	363,975	–	97,435	98,752
Medical, surgical and dental equipment and materials..	240,477	2,322,475	2,783,016	–	–	–
Arms, Explosives and War Stores.	**476,172**	**532,892**	**1,058,743**	**1,135**	**1,182**	**96,043**
Arms......................	30,537	123,028	180,676	100	50	294
Military equipment.........	158,757	2,059	161,296	–	–	–
Ammunition and explosives.	286,878	407,805	716,771	1,035	1,132	95,749
Goods for Exhibition.	**274,809**	**3,527,595**	**3,814,539**	**25,200**	**210,330**	**238,565**
Animals....................	240	1,273,519	1,273,759	25,200	210,330	238,565
Other goods................	274,569	2,254,076	2,540,780	–	–	–

17.—Values of Total Exports, Imports Entered for Consumption, and Duty Collected thereon, at certain Ports and by Provinces, during the fiscal years ended Mar. 31, 1931 and 1932.

NOTE.—The values of imports and exports at the several ports of entry given in the following table indicate that merchandise of the value stated was entered inwards, or passed outwards, at the ports mentioned, but do not imply that the imports were all for consumption at such ports or that the exports originated there.

Province and Port.	1931.			1932.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
P. E. Island.	$	$	$	$	$	$
Totals, P. E. Island......	**1,815,717**	**1,709,296**	**167,524**	**1,145,551**	**1,188,706**	**133,859**
Nova Scotia.						
Halifax......................	34,792,102	20,219,909	2,677,445	28,093,426	13,941,117	2,010,810
North Sydney..............	2,943,274	415,275	30,553	2,033,197	292,108	18,142
Sydney......................	2,043,289	3,118,646	234,742	770,887	1,281,323	129,280
Yarmouth..................	2,531,090	834,490	56,511	1,861,430	516,520	48,493
Totals, Nova Scotia[1]......	**52,107,869**	**28,952,236**	**3,428,148**	**41,414,498**	**18,885,648**	**2,490,995**

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[1] Totals include other smaller ports.

17.—Values of Total Exports, Imports Entered for Consumption, and Duty Collected thereon, at certain Ports and by Provinces, during the fiscal years ended Mar. 31, 1931 and 1932—continued.

Province and Port.	1931.			1932.		
	Total Exports.	Imports for Consump-tion.	Duty Collected.	Total Exports.	Imports for Consump-tion.	Duty Collected.
New Brunswick.	$	$	$	$	$	$
Fredericton	–	1,662,371	744,425	–	1,248,692	544,170
McAdam Jct.	7,121,196	251,719	28,454	3,411,273	50,794	6,407
Moncton	345,920	2,011,138	393,217	174,819	1,260,989	289,829
Saint John	35,902,487	15,547,028	1,638,511	26,369,631	10,456,741	1,401,719
Woodstock	6,427,163	1,628,053	76,118	5,232,146	480,869	45,677
Totals, New Brunswick[1]	**52,349,592**	**24,377,083**	**3,331,242**	**39,482,875**	**15,106,088**	**2,453,162**
Quebec.						
Athelstan	14,843,059	1,478,950	114,445	8,255,204	998,049	87,367
Chicoutimi	5,471,249	2,982,723	149,869	3,156,789	2,767,168	95,801
Coaticook	6,656,678	296,950	18,849	4,708,179	234,732	19,687
Drummondville	36	4,013,935	483,313	–	2,250,949	276,456
Hull	–	1,840,089	203,096	–	1,364,510	165,334
Montreal	132,764,484	201,171,761	36,292,851	116,875,967	138,475,073	29,184,538
Quebec	10,055,317	13,321,727	2,190,517	6,646,697	9,078,956	1,705,502
Rock Island	3,171,319	1,272,012	68,884	1,898,856	867,582	47,994
St. Armand	21,393,414	707,516	46,587	12,053,179	406,661	18,721
St. Hyacinthe	–	2,609,768	150,054	4,050	1,817,856	169,580
St. Johns	51,010,638	8,887,454	772,372	34,519,002	6,085,999	710,582
Shawinigan Falls	–	2,997,401	133,062	–	2,171,681	105,625
Sherbrooke	361,479	5,920,634	631,899	152,744	3,774,896	474,061
Sorel	1,741,941	1,291,311	56,200	4,721,801	836,162	56,974
Sutton	9,796,157	234,083	31,278	4,279,037	226,618	25,373
Three Rivers	6,985,100	4,275,029	403,597	4,473,891	2,780,679	303,673
Valleyfield	–	2,278,554	188,663	–	2,263,890	121,755
Totals, Quebec[1]	**266,110,102**	**257,220,412**	**42,109,876**	**203,169,185**	**177,526,485**	**33,708,759**
Ontario.						
Amherstburg	1,028,807	1,508,931	363,481	546,958	1,022,021	320,132
Belleville	1,244,154	3,040,073	478,922	770	1,188,747	349,397
Brantford	15,523	4,631,002	471,361	11,623	3,115,114	398,707
Bridgeburg	45,173,313	5,049,499	826,196	26,396,764	3,228,764	449,540
Brockville	261,865	1,663,539	126,581	153,914	747,974	110,357
Chatham	36,022	3,091,555	580,014	78	2,494,383	698,254
Cobourg	1,582,666	1,593,169	283,040	1,108,126	1,389,462	391,911
Cornwall	2,066,365	2,422,320	283,676	1,015,336	2,021,583	249,384
Fort Frances	14,324,172	979,587	174,313	10,632,373	1,345,696	241,985
Fort William	29,713,377	7,051,325	1,400,129	16,016,149	3,160,759	827,111
Galt	1,173	4,798,869	439,735	288	3,507,015	357,441
Guelph	–	3,208,705	348,584	–	2,075,279	279,548
Hamilton	2,146,335	35,138,911	4,587,868	1,339,347	20,881,959	3,712,872
Kingston	194,867	2,498,298	207,623	743,980	1,191,749	183,162
Kitchener	–	8,306,492	888,658	1,492	5,133,517	619,686
London	–	11,258,910	1,852,134	–	6,738,467	1,385,700
Niagara Falls	59,497,092	9,287,067	1,370,384	35,640,811	5,457,950	1,004,475
North Bay	253,811	3,399,292	513,986	137,183	2,360,776	410,109
Oshawa	232	9,318,718	2,326,522	372	7,543,063	1,905,934
Ottawa	–	11,771,106	2,264,683	–	7,934,128	1,757,971
Parry Sound	249,931	1,595,563	350,172	1,119,717	843,187	348,711
Peterborough	1,295	6,246,836	1,067,373	1,150	3,677,640	933,826
Port Arthur	54,870,619	1,378,577	194,565	30,045,069	828,633	143,340
Prescott	6,878,982	3,058,477	508,341	4,576,315	1,377,505	552,093
St. Catharines	3,606,171	4,666,726	684,729	4,400,889	3,266,436	583,927
St. Thomas	36,519	2,214,298	396,177	1,993	1,220,587	307,351
Sarnia	27,045,773	15,733,637	632,575	17,980,830	8,891,202	565,299
Sault Ste. Marie	5,406,133	5,337,158	943,213	3,615,010	2,713,789	588,587
Stratford	–	2,143,910	265,109	–	1,535,486	270,305
Sudbury	–	2,670,530	343,825	–	1,121,188	134,415
Toronto	904,876	194,136,182	36,515,378	440,257	131,366,102	29,157,520
Wallaceburg	233,057	2,507,393	410,668	24,232	392,001	115,018
Welland	606,818	11,400,125	799,791	291,910	5,755,526	751,348
Windsor	34,103,289	43,586,231	8,851,997	26,137,356	25,012,864	5,610,154
Woodstock	4,600	1,696,351	155,273	1,133	1,104,429	151,032
Totals, Ontario[1]	**292,564,099**	**440,271,306**	**73,362,478**	**182,740,713**	**279,346,174**	**57,028,973**

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[1] Totals include other smaller ports.

17.—Values of Total Exports, Imports Entered for Consumption, and Duty Collected thereon, at certain Ports and by Provinces, during the fiscal years ended Mar. 31, 1931 and 1932—concluded.

Province and Port.	1931.			1932.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	$	$	$	$	$	$
Manitoba.						
Brandon	29,370	1,432,246	162,976	21,415	381,704	69,930
Emerson	8,225,585	1,120,159	131,924	4,256,109	775,242	102,080
Winnipeg	28,188	32,333,607	6,579,336	289,057	18,503,689	4,446,166
Totals, Manitoba[1]	**8,289,406**	**35,971,119**	**7,006,492**	**4,574,126**	**19,897,480**	**4,651,387**
Saskatchewan.						
Moose Jaw	37,114	3,399,436	437,486	26,762	661,018	136,055
North Portal	5,679,088	1,114,325	120,321	3,205,537	243,946	36,927
Regina	12,860	9,540,959	1,848,018	10.274	3,631,086	799,964
Saskatoon	–	3,992,386	607,320	–	1,334,846	303,436
Totals, Saskatchewan[1]	**5,729,062**	**18,766,485**	**3,065,568**	**3,242,573**	**6,028,614**	**1,310,647**
Alberta.						
Calgary	–	10,568,372	2,010,405	–	4,675,995	1,209,161
Edmonton	–	5,798,581	1,346,254	–	3,101,351	962,614
Lethbridge	847,591	4,264,407	288,255	502,340	1,799,588	151,788
Totals, Alberta[1]	**847,591**	**21,049,995**	**3,703,957**	**502,340**	**9,741,112**	**2,360,023**
British Columbia.						
Abbotsford	2,595,573	230,982	36,125	661,232	138,414	7,373
Nanaimo	5,730,843	198,367	31,161	4,837,415	146,603	18,345
Nelson	190,168	2,543,433	155,455	103,971	2,322,013	100,595
New Westminster	17,955,795	2,024,814	307,940	15,851,265	1,097,531	142,199
Prince Rupert	8,039,369	934,132	137,503	8,094,120	532,344	94,235
Vancouver	95,325,305	63,300,048	10,184,100	76,385,238	40,995,984	7,786,550
Victoria	3,902,418	7,155,731	1,771,670	3,482,790	4,781,456	1,316,141
Totals, British Columbia[1]	**134,605,255**	**77,842,021**	**12,824,379**	**109,956,078**	**50,531,670**	**9,553,857**
Yukon.						
Totals, Yukon	**2,609,355**	**421,718**	**90,519**	**1,337,578**	**240,905**	**54,664**
Prepaid postal parcels, duty received through P.O. Department	–	31,024	7,673	–	11,022	3,021
Customs duty stamps	–	–	153,137	–	–	245,505
Grand Totals	**817,028,048**	**906,612,695**	**149,250,992**	**587,565,517**	**578,503,904**	**113,997,851**

[1] Totals include other smaller ports.

18.—Dutiable Imports of Canada, by Values Entered for Consumption from British Empire and Foreign Countries, under the General, Preferential and Treaty Rate Tariffs, in the fiscal years ended Mar. 31, 1931 and 1932.

Country.	1931.			1932.		
	General Tariff.	Preferential Tariff.	Treaty Tariff.	General Tariff.	Preferential Tariff.	Treaty Tariff.
British Empire.	$	$	$	$	$	$
United Kingdom	30,042,250	77,077,364	1,450,748	21,949,050	56,707,418	1,037,262
Irish Free State	19,902	5,214	2,957	–	–	–
Africa—British East	1,546	2,004,928	–	9,497	1,225,420	–
British South	5,260	2,263,031	1,803	3,438	2,383,348	10,768
British West	7,018	–	238,468	7,481	5	135,410
Australia	400,311	1,688,935	90,668	74,784	1,911,935	371,506
British East Indies—						
British India	67,916	603,069	2,839	48,467	1,932,155	1,826
Ceylon	47,994	289,102	–	37,681	978,776	3,948
Straits Settlements	78,034	562,056	2,732	30,205	343,356	62,765
British Guiana	22,629	4,242,575	87	18,286	4,469,963	38

18.—Dutiable Imports of Canada, by Values Entered for Consumption from British Empire and Foreign Countries, under the General, Preferential and Treaty Rate Tariffs, in the fiscal years ended Mar. 31, 1931 and 1932—concluded.

Country.	1931.			1932.		
	General Tariff.	Preferential Tariff.	Treaty Tariff.	General Tariff.	Preferential Tariff.	Treaty Tariff.
British Empire—concluded.	$	$	$	$	$	$
British West Indies—						
Barbados	32,258	2,593,509	27	6,380	1,385,436	-
Jamaica	36,045	2,266,411	834	13,533	1,974,875	373
Trinidad and Tobago	7,802	1,900,833	16,573	10,377	2,802,260	5,775
Other	24,630	1,984,952	3,163	47,617	949,922	68
Fiji	64	2,794,467	383	2,847	2,600,436	2,269
Hong Kong	639,382	-	22,285	524,849	-	13,355
Newfoundland	58,376	12.098	-	58,536	5,202	172
New Zealand	34,979	4,143,568	5,025	9,504	65,681	1,653
Totals, British Empire[1]	**31,580,815**	**104,436,589**	**1,842,734**	**22,894,534**	**79,747,319**	**1,647,370**
Foreign Countries.						
Argentina	1,522,764	-	857,342	517,018	-	577,304
Belgium	1,116,191	-	4,773,068	963,129	-	2,836,397
Denmark	22,649	-	153,387	11,656	-	32,569
France	1,032,004	-	16,554,080	925,459	-	11,377,485
Germany	12,010,366	-	-	8,841,619	-	-
Italy	440,475	-	3,543,920	329,149	-	3,234,474
Japan	606,265	-	6,098,866	836,770	-	3,419,048
Netherlands	2,455,273	-	2,160,969	1,815,747	-	1,256,682
Norway	90,459	-	640,776	40,377	-	456,901
Spain	418,604	-	1,342,415	242,436	-	1,098,242
Sweden	254,484	-	1,215,309	63,205	-	494,814
Switzerland	1,227,161	-	3,194,480	979,503	-	1,839,013
United States	359,640,701	-	-	229,639,736	-	-
Totals, Foreign Countries[1]	**392,019,989**	-	**44,210,103**	**254,647,604**	-	**29,561,221**
Totals, Dutiable Imports Entered for Consumption	**423,600,804**	**104,436,589**	**46,052,837**	**277,542,138**	**79,747,319**	**31,208,591**

[1] Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, in the five fiscal years ended Mar. 31, 1928-32.

Country.	1928.	1929.	1930.	1931.	1932.
British Empire.	$	$	$	$	$
United Kingdom	186,435,824	194,041.381	189,179,738	149,497,392	106,371,779
Irish Free State	29,611	58,875	267,905	678,115	45,511
Aden	14,546	21,939	12,510	8,734	6,155
Africa—British East	1,223,113	297,683	1,982,243	2,082,125	1,436,338
British South	404,364	280,267	824,025	3,329,528	4,323,169
British West	1,939,313	1,226,539	1,321,906	1,156,779	323,678
Bermuda	53,642	61,771	93,460	297,004	95,729
British East Indies—British India	9,239,779	10,366,548	9,032,740	8,426,716	5,099,736
Ceylon	2,731,531	2,529,140	2,600,423	2,708,845	1,573,916
Straits Settlements	2,459,045	2,015,207	1,536,879	766,862	550,777
Other	6,150	1,739	170	16,971	14,519
British Guiana	6,072,172	4,873,237	3,982,493	4,288,157	4,541,922
British Honduras	157,925	260,519	340,577	207,186	105,780
British Sudan	6,844	12,180	3,414	25,356	8,068
British West Indies—Barbados	6,215,804	5,199,197	4,675,158	4,264,508	2,673,435
Jamaica	5,481,308	4,790,295	5,194,973	4,792,599	4,406,024
Trinidad and Tobago	2,099,201	3,376,058	2,590,157	2,321,007	3,124,902
Other	3,552,999	2,077,839	1,201,625	2,571,905	1,560,516
Gibraltar	683	160	-	-	-
Hong Kong	1,440,897	1,402,502	1,259,085	833,608	660,939
Malta, Cyprus and Gozo	875	2,623	1,627	4,322	1,026
Newfoundland	2,097,525	2,513,406	2,378,103	2,501,761	1,483,881
Oceania—Australia	5,301,618	3,484,836	4,211,351	4,616,722	5,696,770
Fiji	4,317,876	5,697,912	3,676,604	2,807,355	2,606,430
New Zealand	8,262,322	12,771,194	16,282,719	6,671,252	1,080,230
Palestine	15,590	25,163	24,717	23,617	20,753
Totals, British Empire[1]	**249,560,557**	**257,388,210**	**252,674,602**	**204,898,426**	**147,811,993**

[1] Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, in the five fiscal years ended Mar. 31, 1928-32—concluded.

Country.	1928.	1929.	1930.	1931.	1932.
Foreign Countries.	$	$	$	$	$
Abyssinia	40,784	32,295	35,683	30,396	28,007
Argentina	9,849,754	7,427,568	10,232,327	6,739,697	2,608,363
Austria	594,875	678,193	797,370	595,319	322,872
Belgium	9,898,237	12,014,538	13,019,006	8,420,019	5,047,721
Brazil	2,088,200	1,726,314	1,687,707	1,349,124	982,544
Chile	522,597	379,453	667,126	428,310	109,935
China	2,572,453	3,095,296	2,977,022	4,810,814	3,725,558
Colombia	7,580,376	6,849,408	7,252,691	5,036,898	5,035,311
Costa Rica	47,358	75,062	136,934	89,652	27,361
Cuba	5,587,171	4,903,506	3,510,227	2,408,647	981,091
Czechoslovakia	2,423,984	3,297,593	3,792,389	3,176,387	2,759,864
Denmark	126,283	152,721	178,660	265,642	89,266
Greenland	–	214,276	168,376	179,200	170,200
Ecuador	618,001	–	–	–	399
Egypt	159,213	193,573	155,852	77,257	269,503
Finland	93,106	98,286	91,273	90,408	56,578
France	26,473,732	26,215,696	25,158,207	19,004,102	13,570,141
French Africa	142,331	153,244	113,329	107,561	130,168
French East Indies	61,340	1,099	12,685	34,748	19,249
St. Pierre and Miquelon	77,560	55,524	64,169	636,415	107,081
Germany	17,055,798	20,797,683	21,505,428	16,197,036	11,657,869
Greece	254,134	370,708	374,266	233,794	104,492
Guatemala	93,390	20,984	37,598	30,673	14,914
Haiti	198,206	251,497	70,783	–	45
Honduras	622,299	–	352,805	4,280	290
Hungary	66,939	18,001	47,744	66,817	18,802
Iraq (Mesopotamia)	66,738	31,129	29,102	45,525	98,340
Italy	4,241,802	4,260,325	4,963,694	5,048,957	4,193,437
Japan	12,505,373	12,921,317	12,537,253	9,342,967	5,990,401
Korea	2,101	2,359	1,928	718	17
Latvia	41,043	22,102	4,317	615	5,451
Mexico	1,174,087	1,170,245	749,645	769,323	788,447
Morocco	14,728	28,666	48,556	32,159	55,045
Netherlands	8,794,049	9,016,763	9,432,608	7,287,132	5,827,969
Dutch East Indies	1,131,283	704,663	630,120	440,546	340,807
Dutch Guiana	13,409	52,592	28,135	–	–
Dutch West Indies	495,078	173,319	441,151	1,838,964	1,499,701
Nicaragua	2,561	3,337	28,152	29,212	4,278
Norway	1,064,215	989,504	1,104,935	820,902	548,998
Paraguay	130,406	5,589	–	21,229	27,057
Persia	124,427	348,823	246,954	106,043	38,848
Peru	5,216,402	4,447,858	7,492,128	4,535,524	3,515,589
Poland and Danzig	135,452	79,247	143,430	139,003	72,555
Portugal	722,279	678,030	683,114	578,824	341,218
Azores and Madeira	130,343	84,804	139,290	156,151	130,015
Roumania	46,947	32,364	27,308	95,427	21,867
Russia	73,119	236,881	909,525	1,917,652	18,001
Salvador	23,044	–	14,032	1,498	1,088
Santo Domingo	2,452,841	1,135,360	1,776,772	367,872	522,884
Siam	42,379	10,391	51,393	–	–
Spain	2,572,150	2,703,075	2,784,059	1,960,759	1,476,630
Canary Islands	1,964	7,060	5,568	4,300	5,046
Sweden	1,862,120	2,185,089	2,259,404	2,037,457	879,476
Switzerland	8,595,677	7,917,445	7,314,840	5,484,463	3,687,517
Syria	15,162	18,368	17,612	13,150	24,142
Turkey	526,321	574,178	496,156	399,593	256,720
United States	718,896,270	868,012,229	847,442,037	584,407,018	351,686,775
Alaska	171,562	145,010	177,692	106,099	63,29[illegible]
Hawaii	309,753	316,930	332,250	287,673	115,505
Philippines	159,879	196,859	171,474	154,408	118,437
Puerto Rico	1,490	3,760	7,687	431	1,437
Uruguay	80,507	9,122	66,147	152,424	131,344
Venezuela	213,538	701,935	528,962	3,024,584	329,026
Yugoslavia	12,041	25,543	30,938	68,911	12,080
Totals, Foreign Countries[1]	**859,395,999**	**1,008,290,881**	**995,598,980**	**701,714,269**	**430,691,911**
Grand Totals, Imports	**1,108,956,466**	**1,265,679,091**	**1,248,273,582**	**906,612,695**	**578,503,904**
Continents.					
Europe—United Kingdom	186,435,824	194,041,381	189,179,738	149,497,392	106,371,779
Other Europe	85,853,184	92,737,045	95,548,297	74,339,207	50,898,616
North America	749,501,321	894,230,637	871,452,695	607,825,326	369,322,592
South America	32,390,560	26,473,076	31,937,716	25,575,947	17,281,500
Asia	32,428,804	33,692,542	31,142,067	28,133,865	18,539,314
Oceania	18,351,448	22,270,872	24,502,924	14,383,002	9,498,935
Africa	3,995,325	2,233,538	4,510,145	6,857,956	6,591,168

[1] Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce, from Canada to the British Empire and to Foreign Countries, in the five fiscal years ended Mar. 31, 1928-32.

Country.	1928.	1929.	1930.	1931.	1932.
British Empire.	$	$	$	$	$
United Kingdom	410,691,392	429,730,485	281,745,965	219,246,499	174,043,725
Irish Free State	4,325,251	4,144,743	2,711,544	2,764,489	2,661,421
Aden	31,056	40,906	63,355	33,265	9,519
Africa—British East	1,223,232	1,568,171	1,707,167	968,898	372,388
British South	8,724,969	12,231,773	10,917,642	10,286,940	8,401,496
British West	893,074	1,245,818	1,083,269	924,149	400,062
Bermuda	1,364,952	1,628,003	2,287,280	2,492,260	1,948,898
British East Indies—British India	11,042,851	11,858,436	9,116,251	6,957,050	3,041,522
Ceylon	727,369	661,793	486,236	181,653	59,183
Straits Settlements	1,540,530	1,203,909	1,105,228	685,381	340,072
Other	4,428	8,526	8,875	-	130
British Guiana	2,284,744	2,238,506	1,661,332	1,139,915	778,469
British Honduras	604,613	900,034	892,518	1,742,464	1,008,412
British Sudan	118,449	160,704	95,093	13,971	1,576
British West Indies—Barbados	1,836,952	1,681,950	1,324,569	1,118,603	1,092,425
Jamaica	4,951,196	5,266,083	5,138,757	3,749,394	2,634,699
Trinidad and Tobago	4,240,751	4,153,571	3,998,197	3,286,070	2,147,637
Other	3,861,847	4,656,219	4,567,639	4,273,905	2,398,372
Gibraltar	23,958	75,391	71,491	41,978	9,622
Hong Kong	2,465,946	2,837,463	2,000,124	1,961,854	1,434,659
Malta, Cyprus and Gozo	349,881	1,110,143	318,853	537,741	297,312
Newfoundland	11,661,248	11,160,510	12,178,392	10,658,637	6,601,852
Oceania—Australia	14,189,446	19,470,305	16,322,771	6,788,708	5,387,982
Fiji	297,545	329,797	431,211	212,682	123,376
New Zealand	11,366,500	17,357,763	19,166,488	12,688,475	3,724,225
Other	49,319	78,051	71,957	25,435	8,310
Palestine	104,408	189,952	98,934	83,980	29,043
Totals, British Empire[1]	**498,975,907**	**535,989,288**	**379,571,138**	**292,864,396**	**218,956,387**
Foreign Countries.					
Argentina	11,085,728	14,493,191	19,206,746	10,007,794	4,344,735
Austria	291,824	349,701	435,770	234,878	101,143
Belgium	20,781,857	27,301,384	21,692,858	14,962,044	14,036,437
Belgian Congo	110,594	189,180	322,837	93,313	47,957
Bolivia	117,954	87,604	132,315	42,964	91,704
Brazil	4,897,082	5,872,940	4,292,293	2,799,567	979,854
Chile	1,347,528	2,403,442	2,280,003	1,057,410	405,359
China	13,432,396	24,242,507	16,527,959	9,122,190	5,908,133
Colombia	1,732,573	1,797,393	1,643,048	1,191,940	533,891
Costa Rica	203,650	184,773	97,617	61,232	45,078
Cuba	5,386,679	4,442,953	4,245,576	2,868,103	1,637,676
Czechoslovakia	1,439,483	1,703,825	478,847	252,041	173,098
Denmark	6,390,662	5,981,035	4,108,704	3,604,492	3,875,680
Ecuador	124,570	139,874	111,674	59,199	29,846
Egypt	1,798,004	2,845,973	1,028,530	781,305	173,201
Estonia	174,181	88,680	32,509	44,510	861
Finland	1,838,447	2,122,129	1,331,652	1,388,556	666,459
France	9,946,145	16,131,188	16,507,011	13,285,758	17,954,321
French Africa	456,912	475,026	612,653	561,185	343,758
French Oceania	9,413	40,042	51,301	232,001	753,642
French West Indies	371,511	511,374	537,990	374,382	249,904
St. Pierre and Miquelon	1,476,340	2,729,124	5,859,251	11,004,479	8,642,119
Germany	42,244,217	46,708,804	25,343,661	12,942,236	10,405,256
Greece	4,282.227	11,850,771	5,387,067	5,642,245	2,412,035
Guatemala	175,917	191,930	172,877	140,599	153,543
Haiti	364,770	394,791	142,578	90,891	83,299
Honduras	110,832	235,957	143,701	133,917	111,058
Iraq (Mesopotamia)	289,938	137,729	79,130	19,749	5,231
Italy	18,742,516	23,024,899	11,387,294	14,552,319	4,265,324
Japan	32,968,243	42,099,968	30,475,581	18,958,965	16,555,690
Korea	487,360	160,995	18,509	9,961	10,237
Latvia	125,322	34,315	11,248	16,813	4,260
Mexico	2,539,947	2,675,985	2,583,440	2,035,576	1,366,947
Morocco	277,783	383,699	306,654	160,411	71,709
Netherlands	35,537,951	44,366,888	15,944,469	10,477,553	13,502,157
Dutch East Indies	2,364,334	3,605,367	2,279,871	953,778	507,258
Dutch Guiana	116,414	123,580	102,204	78,216	63,356
Dutch West Indies	163,249	185,044	264,502	183,885	53,225

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[1] Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, in the five fiscal years ended Mar. 31, 1928-32—concluded.

Country.	1928.	1929.	1930.	1931.	1932.
Foreign Countries—concluded.	$	$	$	$	$
Nicaragua	72,733	66,562	61,999	35,758	22,363
Norway	6,665,770	7,435,537	3,674,985	3,305,334	3,324,772
Panama	1,124,817	1,040,519	877,780	706,035	336,323
Paraguay	80,756	96,194	75,401	59,854	17,303
Persia	72,896	83,577	148,928	88,465	–
Peru	1,285,525	1,311,267	1,795,003	1,579,294	628,167
Poland and Danzig	455,975	356,759	85,234	60,118	35,089
Portugal	942,210	5,735,299	1,410,606	611,643	81,472
Azores and Madeira	210,004	187,199	153,946	163,333	44,743
Portuguese Africa	1,054,816	943,194	1,210,116	1,109,735	1,063,283
Roumania	795,953	568,432	449,303	49,733	22,548
Russia	2,424,071	2,457,492	3,738,401	568,100	55,197
Salvador	97,232	75,803	91,432	120,990	22,619
Santo Domingo	413,034	332,802	227,510	243,614	262,273
Siam	117,227	250,575	126,808	47,017	6,222
Spain	609,653	5,704,255	4,503,231	1,297,080	566,103
Canary Islands	131,058	71,374	99,048	69,760	23,264
Sweden	4,612,342	4,765,818	4,678,037	2,447,205	2,385,789
Switzerland	498,270	483,919	1,197,480	561,747	280,090
Syria	158,742	476,229	242,184	82,057	26,825
Turkey	62,640	146,953	82,679	22,303	7,714
United States	478,145,383	499,612,145	515,049,763	349,660,563	235,186,674
Alaska	311,434	411,836	515,626	468,978	364,147
Hawaii	79,369	37,262	37,576	92,248	201,083
Philippines	272,751	321,219	266,794	236,478	296,931
Puerto Rico	815,388	977,961	877,934	677,118	450,184
Uruguay	1,628,209	1,107,631	1,094,771	736,658	424,927
Venezuela	1,497,544	1,792,549	1,286,943	1,058,223	549,827
Yugoslavia	137,955	48,829	28,658	12,916	4,185
Totals, Foreign Countries[1]	**729,373,436**	**827,720,384**	**740,687,164**	**506,878,271**	**357,387,915**
Grand Totals, Canadian Exports	**1,228,349,343**	**1,363,709,672**	**1,120,258,302**	**799,742,667**	**576,344,302**
Continents.					
Europe—United Kingdom	410,691,392	429,730,485	281,745,965	219,246,499	174,043,725
Other Europe	164,095,981	213,107,315	125,942,697	89,978,203	77,223,644
North America	519,182,576	542,487,961	561,270,595	395,431,973	266,823,563
South America	27,415,602	32,557,990	34,654,797	20,564,860	8,890,776
Asia	65,812,851	88,232,889	63,073,797	39,452,990	28,242,090
Oceania	26,264,343	37,313,278	36,081,304	20,039,549	10,198,618
Africa	14,886,598	20,279,754	17,489,147	15,028,593	10,921,886

[1] Totals include other minor countries not specified.

21.—Values of Merchandise Imported into, and Exported from, Canada through United States during the fiscal years ended Mar. 31, 1931 and 1932.

Country whence Imported and to which Exported.	Merchandise Imported through United States.		Merchandise Exported through United States.	
	1931.	1932.	1931.	1932.
	$	$	$	$
British Empire.				
United Kingdom	169,820	202,454	79,880,087	44,683,160
Irish Free State	–	–	185,546	107,096
Australia	418,448	75,916	1,141,279	678,254
Bermuda	–	17,818	19,962	34,169
British Africa	36,888	61,002	3,937,708	1,041,531
British India	42,818	23,466	1,630,277	695,009
British East Indies	140,708	102,680	699,255	312,104
British Guiana	–	157,243	139,333	61,967
British Honduras	105,208	41,772	15,457	27,642
British West Indies	17,570	155,782	1,653,515	772,263
Hong Kong	8,716	11,808	78,115	75,822
Malta	–	–	174,648	72,010
Newfoundland	25	12	46,889	187,382
New Zealand	35,824	10,777	2,822,158	483,159
Totals, British Empire[1]	**976,898**	**862,378**	**92,608,483**	**49,276,828**

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[1] Totals include other minor countries not specified.

21.—Values of Merchandise Imported into, and Exported from, Canada through the United States during the fiscal years ended Mar. 31, 1931 and 1932—concluded.

Country whence Imported and to which Exported.	Merchandise Imported through United States.		Merchandise Exported through United States.	
	1931.	1932.	1931.	1932.
	$	$	$	$
Foreign Countries.				
Argentina	550,354	121,553	4,465,932	1,053,584
Austria	5,142	1,953	173,602	64,955
Belgium	57,839	36,160	403,940	150,812
Brazil	482,764	311,436	2,186,536	672,507
Central American States[2]	7,560	840	346,320	228,661
Chile	6,374	7,230	780,681	171,159
China	2,902,503	1,148,093	359,208	486,494
Colombia	382,029	505,452	552,787	216,643
Cuba	1,000,213	374,416	1,172,413	579,132
Czechoslovakia	20,865	16,253	115,779	50,531
Denmark	9,919	1,521	2,284,103	941,109
Egypt	35,722	19,328	570,614	79,761
Finland	125	182	356,696	146,029
France	36,848	21,508	1,001,002	810,780
French Africa	78,428	9,077	375,184	127,504
French West Indies	–	–	128,432	138,178
Germany	364,784	188,952	1,960,114	1,129,357
Greece	46,982	8,345	182,953	27,618
Haiti	–	–	90,237	71,656
Italy	250,267	145,933	1,130,211	439,072
Japan	238,034	106,811	698,773	812,243
Mexico	371,131	392,348	1,988,487	1,348,828
Morocco	23,234	16,057	154,818	67,485
Netherlands	148,946	74,011	1,731,311	1,155,475
Dutch East Indies	147,705	103,353	921,120	393,251
Norway	486	7,788	405,979	239,549
Panama	–	–	375,765	180,935
Persia	22,793	18,216	67,367	–
Peru	–	–	504,905	228,961
Philippine Islands	69,683	97,267	19,788	53,123
Puerto Rico	203	–	128,106	120,963
Portugal	6,086	401	138,456	60,387
Portuguese Africa	–	–	448,174	586,591
Roumania	6,352	1,261	46,700	18,476
Russia	25,387	–	392,619	52,456
Santo Domingo	2,562	–	124,718	118,939
Spain	216,304	28,210	1,128,567	493,791
Sweden	27,731	10,752	604,381	354,473
Switzerland	55,069	57,059	162,232	85,144
Syria	5,721	3,627	75,308	23,478
Turkey	225,592	137,574	21,285	7,414
Uruguay	31,116	51,912	446,702	142,672
Venezuela	60,668	49,577	993,787	518,827
Totals, Foreign Countries[1]	**7,981,306**	**4,097,946**	**31,126,585**	**14,963,964**
Grand Totals[1]	**8,958,204**	**4,960,324**	**123,735,068**	**64,240,792**

[1] Totals include other countries not specified.
[2] Costa Rica, Guatemala, Honduras, Nicaragua and Salvador.

Subsection 10.—Comparison of the Volume of Imports and Exports.[1]

The statistics of the external trade of Canada have not, until lately, been analysed in detail to reveal the physical volume of external trade as well as the dollar value of that trade, and have therefore been somewhat misleading when used to show the physical growth of production and external trade. When, for example, Table **1** of this chapter is examined, it seems to show stagnation in our external trade between the early 70's and the middle 90's of last century and a very rapid growth thereafter. Yet we know that the apparent stagnation was partly due to the fall in general prices between the '70's and the middle '90's, while the rapid growth of the later figures is exaggerated by the rise of prices after 1897, especially in the war period 1914 to 1921. Since 1929 another precipitate decline in prices has exaggerated the actual decrease of trade. Thus the figures as published give us no true measure of the *volume* of our external trade, yet, of the commodities that satisfy human needs, it is the volume rather than the value with which the masses of the population are more intimately concerned. Volume is, from many points of view, a more important consideration than value, and it is desirable to secure a record of the fluctuations in the volume of the country's trade as distinguished from the value thereof. This is what is attempted in Table **22**.

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[1] Further information as to the methods adopted in making the following analyses will be found on p. 806 of the Bureau's Annual Report on the Trade of Canada for the fiscal year ended Mar. 31, 1932.

The method adopted for ascertaining the fluctuations in volume has been to take a base year—1926—and to re-value the quantities of each commodity imported or exported in any given year at the average import or export value of that commodity in the standard or base year. Where quantities are not available, the values of items are assumed to have moved in the same direction and in the same proportions as closely related commodities. For this reason the results must not be regarded as of great precision but, since the value of goods not returned by quantity, and of those not comparable over a limited series of years, is small in comparison with the total trade, the amount of error introduced on their account is not considerable. By this method it is comparatively easy to compare the volume of the trade in a particular year with that in a recent year and the margin of error is fairly small. When, however, a comparison of the volume of trade in a particular year with that of another year ten or more years before is undertaken, the margin of error is very much greater. Certain new commodities have come into existence in the course of the decade, while the qualities of others have been materially changed; further, various new items have been added to the customs classifications, and it is not always possible to say just what customs items of 1932 correspond with those of 1914. For these reasons comparisons with the pre-war fiscal year ended 1914 have been discontinued since 1929. This comparison for 1929 and certain previous years appeared on pp. 581-583 of the 1930 Year Book.

In Table **22** the values and volumes of imports and exports respectively for the years 1927, 1928, 1929, 1930, 1931 and 1932 are compared with 1926, for the main groups, as follows: the imports and exports are first shown at the values at which the trade was recorded; the same imports and exports are then shown at the value they would have amounted to if the average price or unit value had been the same in each year as it was in 1926. In other words, the figures on the basis of 1926 average values enable a comparison to be made of the imports or exports for the given years on the basis of variations in quantity only, variations due to different prices having been eliminated. Index numbers of declared values, that is, the total declared values of the imports or exports in each year expressed as percentages of 1926, are then given. These are followed by the index numbers of average values, which show the prices at which goods were imported or exported in each year expressed as percentages of the prices in 1926. Finally, the index numbers of physical volume show the relative quantity of merchandise imported or exported in each year expressed as a percentage of the quantity of the same merchandise in 1926.

For an analysis in greater detail, dealing similarly with sub-groups and principal commodities imported and exported, the reader is referred to pp. 806-826 of the Annual Report on the Trade of Canada for 1932 published by the Dominion Bureau of Statistics.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, for the fiscal years ended Mar. 31, 1926-32.

IMPORTS FOR CONSUMPTION.

Main Group.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	Values as Declared. (In thousands of dollars.)						
Agricultural and Vegetable Products	203,417	213,098	238,186	233,130	227,049	177,629	128,621
Animals and Their Products	49,186	53,214	65,790	71,662	69,854	45,996	24,563
Fibres and Textiles	184,762	183,584	186,994	206,439	185,241	130,717	83,879
Wood and Paper	40,403	47,962	51,751	59,215	60,951	46,042	32,008
Iron and Its Products	181,197	229,429	258,195	345,194	314,367	193,933	98,812
Non-Ferrous Metals	47,693	52,748	61,565	76,858	90,421	60,595	34,301
Non-Metallic Minerals	139,034	156,785	153,049	166,964	186,496	153,579	102,147
Chemicals and Allied Products	28,404	31,845	33,572	37,723	39,908	35,651	30,731
Miscellaneous	53,233	62,227	59,854	68,494	73,987	62,471	43,440
Totals	927,329	1,030,892	1,108,956	1,265,679	1,248,274	906,613	578,502
	On the Basis of 1926 Average Values. (In thousands of dollars.)						
Agricultural and Vegetable Products	203,417	229,314	257,896	289,030	294,044	266,924	242,431
Animals and Their Products	49,186	56,931	62,257	66,545	74,175	58,386	28,900
Fibres and Textiles	184,762	214,818	218,416	237,405	230,245	212,295	162,214
Wood and Paper	40,403	47,746	51,266	60,373	62,181	51,850	35,289
Iron and Its Products	181,197	240,441	274,581	360,314	312,159	195,254	100,799
Non-Ferrous Metals	47,693	53,431	60,841	79,124	88,494	70,490	45,191
Non-Metallic Minerals	139,034	158,909	171,982	195,930	226,542	193,863	164,598
Chemicals and Allied Products	28,404	32,723	34,096	38,656	41,030	40,035	35,504
Miscellaneous	53,233	66,217	64,355	75,720	84,336	80,283	66,004
Totals	927,329	1,100,530	1,195,690	1,403,097	1,413,206	1,169,380	880,930
	Index Numbers of Declared Values. (1926=100.)						
Agricultural and Vegetable Products	100·0	104·8	117·1	114·6	111·6	87·3	63·2
Animals and Their Products	100·0	108·2	133·8	145·7	142·0	93·5	50·0
Fibres and Textiles	100·0	99·4	101·2	111·7	100·3	70·7	45·4
Wood and Paper	100·0	118·7	128·1	146·6	150·9	114·0	79·2
Iron and Its Products	100·0	126·6	142·5	190·5	173·4	107·0	54·5
Non-Ferrous Metals	100·0	110·6	129·1	161·2	189·6	127·1	71·9
Non-Metallic Minerals	100·0	112·8	110·1	120·1	134·1	110·5	73·5
Chemicals and Allied Products	100·0	112·1	118·2	132·8	140·5	125·5	108·2
Miscellaneous	100·0	116·9	112·4	128·7	138·9	117·4	81·6
Totals	100·0	111·2	119·6	136·5	134·6	97·8	62·4
	Index Numbers of Average Values. (1926=100.)						
Agricultural and Vegetable Products	100·0	92·9	92·4	80·7	77·2	66·5	53·1
Animals and Their Products	100·0	93·5	105·7	107·7	94·2	78·8	85·0
Fibres and Textiles	100·0	85·5	85·6	87·0	80·5	61·6	51·7
Wood and Paper	100·0	100·5	100·9	98·1	98·0	88·8	90·7
Iron and Its Products	100·0	95·4	94·0	95·8	100·7	99·3	98·0
Non-Ferrous Metals	100·0	98·7	101·2	97·1	102·2	86·0	75·9
Non-Metallic Minerals	100·0	98·7	89·0	85·2	82·3	79·2	62·1
Chemicals and Allied Products	100·0	97·3	98·5	97·6	97·3	89·0	86·6
Miscellaneous	100·0	94·0	93·0	90·5	87·7	77·8	65·8
Totals	100·0	93·6	92·7	90·2	88·3	77·5	65·7
	Index Numbers of Physical Volume. (1926=100.)						
Agricultural and Vegetable Products	100·0	112·7	126·8	142·1	144·6	131·2	119·2
Animals and Their Products	100·0	115·7	126·6	135·3	150·8	118·7	58·8
Fibres and Textiles	100·0	116·3	118·2	128·5	124·6	114·9	87·8
Wood and Paper	100·0	118·2	126·9	149·4	153·9	128·3	87·3
Iron and Its Products	100·0	132·7	151·5	198·9	172·2	107·8	55·6
Non-Ferrous Metals	100·0	112·0	127·6	165·9	185·5	147·8	94·8
Non-Metallic Minerals	100·0	114·3	123·7	140·9	162·9	139·4	118·4
Chemicals and Allied Products	100·0	115·2	120·0	136·1	144·5	140·9	125·0
Miscellaneous	100·0	124·4	120·9	142·2	158·4	150·8	124·0
Totals	100·0	118·7	128·9	151·3	152·4	126·1	95·0

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, for the fiscal years ended Mar. 31, 1926-32—concluded.

EXPORTS OF CANADIAN PRODUCE.

Main Group.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	Values as Declared. (In thousands of dollars.)						
Agricultural and Vegetable Products.	606,059	574,994	555,111	646,514	384,636	292,280	204,398
Animals and Their Products.........	190,976	167,292	165,845	158,757	133,009	83,715	68,799
Fibres and Textiles..................	8,940	7,666	10,904	9,678	9,066	6,504	5,512
Wood and Paper.....................	278,675	284,120	284,543	288,622	289,567	230,604	175,740
Iron and Its Products................	74,735	74,285	63,754	82,257	78,590	38,938	15,463
Non-Ferrous Metals..................	97,476	80,639	90,840	112,778	154,319	95,652	69,073
Non-Metallic Minerals...............	24,713	28,881	25,950	27,402	28,545	21,108	13,456
Chemicals and Allied Products.....	17,354	16,204	17,366	19,438	22,468	12,826	10,536
Miscellaneous.......................	16,428	18,077	15,036	18,264	20,058	18,116	13,367
Totals..................	1,315,356	1,252,158	1,228,349	1,363,710	1,120,258	799,743	576,344
	On the Basis of 1926 Average Values. (In thousands of dollars.)						
Agricultural and Vegetable Products.	606,059	590,468	602,371	781,889	452,780	487,385	438,857
Animals and Their Products.........	190,976	173,307	160,560	143,049	127,201	86,906	109,631
Fibres and Textiles..................	8,940	8,528	13,083	10,505	11,266	10,608	10,544
Wood and Paper.....................	278,675	289,748	299,996	308,999	322,896	270,812	231,671
Iron and Its Products................	74,735	74,794	61,319	99,877	91,513	59,256	20,105
Non-Ferrous Metals..................	97,476	82,452	103,167	133,037	163,535	118,576	140,492
Non-Metallic Minerals...............	24,713	28,657	25,439	26,638	33,515	22,521	14,874
Chemicals and Allied Products......	17,354	17,143	20,333	23,824	29,838	17,571	16,616
Miscellaneous.......................	16,428	18,588	16,017	20,760	22,952	24,197	23,086
Totals..................	1,315,356	1,283,685	1,302,285	1,548,578	1,255,496	1,097,832	1,005,876
	Index Numbers of Declared Values. (1926=100.)						
Agricultural and Vegetable Products.	100·0	94·9	91·6	106·7	63·5	48·2	33·7
Animals and Their Products.........	100·0	87·6	86·8	83·1	69·7	43·8	36·0
Fibres and Textiles..................	100·0	85·7	122·0	108·3	101·4	72·8	61·7
Wood and Paper.....................	100·0	102·0	102·1	103·6	103·9	82·8	63·1
Iron and Its Products................	100·0	99·4	84·0	110·1	105·2	52·1	20·7
Non-Ferrous Metals	100·0	82·7	93·2	115·7	158·3	98·1	70·9
Non-Metallic Minerals......	100·0	116·9	105·0	110·9	115·5	85·4	54·4
Chemicals and Allied Products	100·0	93·4	100·1	112·0	129·5	73·9	60·7
Miscellaneous........................	100·0	110·0	91·5	111·2	122·1	110·3	81·4
Totals..................	100·0	95·2	93·4	103·7	85·2	60·8	43·8
	Index Numbers of Average Values. (1926=100.)						
Agricultural and Vegetable Products.	100·0	97·4	92·2	82·7	85·0	60·0	46·6
Animals and Their Products.........	100·0	96·5	103·3	111·0	104·6	96·3	62·8
Fibres and Textiles.................	100·0	89·9	83·3	92·1	80·5	61·3	52·3
Wood and Paper....................	100·0	98·1	94·8	93·4	89·7	85·2	75·9
Iron and Its Products................	100·0	99·3	102·3	82·4	85·9	65·7	76·9
Non-Ferrous Metals................	100·0	97·8	88·1	84·8	94·4	80·7	49·2
Non-Metallic Minerals...............	100·0	100·8	102·0	102·9	85·2	93·7	90·5
Chemicals and Allied Products.....	100·0	94·5	85·4	81·6	75·3	73·0	63·4
Miscellaneous........................	100·0	97·3	93·9	88·0	87·4	74·9	57·9
Totals............... ...	100·0	97·5	94·3	88·1	89·2	72·8	57·3
	Index Numbers of Physical Volume. (1926=100.)						
Agricultural and Vegetable Products.	100·0	97·4	99·4	129·0	74·7	80·4	72·4
Animals and Their Products........	100·0	90·7	84·1	74·9	66·6	45·5	57·4
Fibres and Textiles................	100·0	95·4	146·3	117·5	126·0	118·7	117·9
Wood and Paper	100·0	104·0	107·7	110·9	115·9	97·1	83·1
Iron and Its Products...............	100·0	100·1	82·0	133·6	122·4	79·3	26·9
Non-Ferrous Metals................	100·0	84·6	105·8	136·5	167·8	121·6	144·1
Non-Metallic Minerals...............	100·0	116·0	102·9	107·8	135·6	91·1	60·2
Chemicals and Allied Products......	100·0	98·8	117·2	137·3	171·9	73·0	95·7
Miscellaneous................. .. .	100·0	113·1	97·5	126·4	139·7	147·3	140·5
Totals................	100·0	97·6	99·0	117·7	95·4	83·5	76·5

Section 4.—The Tourist Trade of Canada.[1]

Tourist Expenditures in Canada.—In recent years the tourist trade has become an important source of revenue in certain sections of the Dominion, materially affecting the balance of trade. It represents the economic disposition of national assets in which Canada is particularly rich, namely: its picturesque scenery; its invigorating climate; its opportunities for hunting, fishing and boating, as well as for winter sports—for the exploitation of which a considerable capital expenditure has been made on hotel accommodation, improved highways and other attractions. Those entering from the United States in automobiles are by far the most important class of tourists. The business accruing to the Dominion in this manner represents some return for expenditures on highways which have been very large in the period since the War (see pp. 682-684). In order to attract this traffic, highways have been built through regions of picturesque scenery, such as the Rocky mountains, northern Ontario and the Laurentians and Gaspé in Quebec. A further asset for Canada arises from the fact that these scenic regions with their invigorating climate are at their best in the summer holiday season when motorists are most ready to travel. The expenditure of travellers coming to Canada from other countries on business has the same effect, so far as its influence on the balance of trade is concerned, as the export of additional commodities would have. Indeed, in so far as commodities are sold to tourists travelling in the Dominion, our exportable surplus of such commodities is reduced.

It is impossible to obtain a direct record of expenditures of this kind. Moreover, even a rough estimate of the total is extremely difficult to make, visitors to Canada being of all classes, engaging in widely different activities or forms of recreation, remaining for varying periods, with expenditures undoubtedly ranging from very small to very large amounts.

The tourists who enter Canada may be divided into three classes: (a) those coming in *via* ocean ports; (b) those entering from the United States in automobiles; (c) those entering from the United States by rail or steamer. In 1932 these classes are estimated, according to recently revised figures, to have expended in Canada $10,543,000, $145,307,000 (equivalent to $159,838,000 in Canadian funds at average rates of exchange for the period) and about $38,243,000 ($42,067,000 in Canadian funds) respectively, or a grand total of approximately $194,093,000 (about $212,448,000 in Canadian funds).

The Department of National Revenue records the number of tourists entering Canada in automobiles from the United States through each of the ports of entry along the border. An estimate of the expenditure of this class of tourist according to the provinces by which they entered, shows the following provincial distribution of their expenditure in 1932: Maritime Provinces, $8,366,830; Quebec, $35,903,644; Ontario, $87,482,247; Manitoba, $1,606,729; Saskatchewan, $680,769; Alberta, $613,850 and British Columbia, $10,622,601.

Expenditures of Canadian Tourists Abroad.—Canadian tourists visiting other countries travel in the main to the British Isles and other European countries on visits home, or as sight-seers. Again, many of them, especially elderly or delicate persons, go to Florida, Bermuda or the West Indies. These tourists may be classified in the same three classes as those entering Canada. The total expenditures of such Canadian tourists in other countries were $57,403,000 in 1932—a decline of $19,049,000 from the previous year.

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[1] Abridged from "The Tourist Trade in Canada, 1920-26", and reports for each year from 1927 to 1932 inclusive, published by the Bureau of Statistics and obtainable on application. These reports contain a full explanation of the methods used in making the estimates.

Summary.—For the years 1920 to 1932 the total estimated expenditures of tourists from other countries in Canada, as compared with those of Canadian tourists in other countries, are given in Table **23**.

23.—Tourist Expenditures in Canada and of Canadians Abroad, 1920-32.

Year.	Estimated Expenditure of Tourists from Other Countries in Canada.	Estimated Expenditure of Canadian Tourists in Other Countries.	Estimated Excess of Expenditure of Tourists from Other Countries.
	$	$	$
1920	83,734,000	–	–
1921	86,394,000	–	–
1922	91,686,000	–	–
1923	130,977,000	–	–
1924	173,002,000	84,973,000	88,029,000
1925	193,174,000	86,160,000	107,014,000
1926	201,167,000	98,747,000	102,420,000
1927	238,477,000	108,750,000	129,727,000
1928	275,230,000	107,522,000	167,708,000
1929	309,379,000	121,645,000	187,734,000
1930	279,238,000	100,389,000	178,849,000
1931	250,776,000	76,452,000	174,324,000
1932	194,093,000[1]	57,403,000	155,045,000

[1] Converted into Canadian funds this was the equivalent of $212,448,000.

It will be noticed that until the depression made itself felt in 1930, while there was a steady increase in the amount spent by tourists from other countries in Canada, the amount spent by Canadians in other countries also tended to increase. Indeed, as compared with the generally depressed state of trade and industry during the past few years, Canada's tourist business has exhibited a surprising vitality. The "favourable" balance accruing from tourist trade grew rapidly in the post-war period to 1929 and has not declined in proportion to commodity trade for the latest two years. The statistics demonstrate how valuable an asset to Canada is her tourist trade, the expenditures of tourists in Canada in 1932 constituting an "invisible" export of greater value than any single commodity exported in the calendar year 1932. If the "invisible" import of expenditure of Canadian tourists in other countries is deducted, the balance still represents an item not exceeded by any other single export.

Section 5.—Balance of International Payments 1920-32.[1]

"Balance of Trade" figures are frequently misinterpreted due to the persistence of the doctrine long ago exploded that a nation's trade is necessarily in a healthy state when exports exceed imports, necessitating an import of gold to make up the difference. Trade was then said to show a "favourable" balance. This theory only took account of the "visible" or commodity items of trade, whereas the true balance of a nation's trade can only be known when not only the commodity items are considered, but also the "invisible" items such as interest, freight, immigrant remittances, financial services, tourist traffic, etc. In short, all debit and credit transactions must be set down in order to find out the true balance. If all the visible and invisible items are thus tabulated the debit or credit difference will be a final invisible item—capital import or export—and this will bring the nation's trade account into a state of balance. Thus, the commodity trade balance of a country cannot be understood by itself but only as it is interpreted in the light of the invisible items of a country's international transactions. In the light of such data, it will be found that a so-called favourable or unfavourable balance will mean an entirely different thing at different times in a country's history. The balance of international payments, which takes account not only of commodity trade but of all transactions, reveals the meaning of the trade balance. It shows, for example, that in 1920, 1921 and 1922 our international accounts were balanced by large imports of capital, although our commodity trade balance was favourable in 1920 and 1922. During these years Britain repaid us war funds as follows: 1920, $104,000,000; 1921, $128,000,000; 1922, $84,000,000. From 1923-28, however, the international accounts show a credit balance after allowing for interest payments and maturities, thus denoting capital exports. In these years Canada became temporarily a capital-exporting country. In these latter years, therefore, the explanation of our favourable commodity trade balance was quite different from that for the period, 1894 to 1903, when it was explained by payments of interest and maturities.

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[1] Abridged from the annual report "Canada's Balance of International Payments", by Herbert Marshall, B.A., F.S.S., Chief of the Internal Trade Branch of the Dominion Bureau of Statistics. This report includes explanatory data on the methods followed in computing these statistics.

From the foregoing it will be seen that an estimated balance of international payments is indispensable to the understanding of trade accounts. It has, however, a great many other important uses, among which the following may be mentioned: (1) to give a comprehensive picture of our international debits and credits and how they are balanced; (2) to show the extent of our international borrowings and lendings; (3) to show the magnitude of individual invisible items, such as interest, freights, tourist traffic, etc., in our international transactions; (4) to explain exchange disturbances and the effect of international financial difficulties; and (5) to furnish data for guidance in the formulation of international fiscal, financial and commercial policy.

As already stated, in the years from 1923 to 1928 Canada became temporarily a capital exporting country. This was the result of abundant funds accumulating in the Dominion owing to three causes. In the first place, there had come into the country during the War about $1,250,000,000 through the purchase of our commodities at high prices; this was seeking an investment outlet. In the second place, the large investment of United States capital in the Dominion from 1914 to 1920 was now increasing the nation's output. In the third place, successive large harvests at relatively high world prices were a foundation of prosperity. These factors combined, caused an unprecedented accumulation of savings, which was used by financial institutions and individuals not only to finance domestic capital needs, but also to avail themselves of opportunities for profitable investment abroad. The prolonged and extravagant "bull" market in the New York and other United States' stock exchanges culminating in the early summer of 1929 and the high interest rates prevailing in those markets attracted enormous sums to the United States from other countries, including Canada. Thus from 1923 to 1928 we had on balance an export of capital to our credit, though at the same time other countries, particularly the United States, continued to invest large sums in the Dominion.

In contrast to this there were unfavourable balances in 1929 and 1930, considering both visible and invisible items, of $65,000,000 and $159,000,000 respectively, while in 1931 the balance was favourable by about $28,000,000. In the light of all available information, it appears that the balances in 1929 and 1930 represented a net movement of capital into Canada for investment, while that of 1931 represented a net movement outwards. In the latter year, however, the capital export appears to have been in the main not for investment but for the purpose of retiring maturing issues and for repurchases.

Unfortunately, the statistics of current capital movements leave much to be desired, but such as do exist point clearly to the conclusion that there was a movement, on balance, of short and long term funds into Canada in 1929. Short term funds employed by the chartered banks largely in New York, fell from $188,000,000 at the beginning of 1929 to $98,000,000 at the end of the year. There was also a considerable repatriation of private short term capital, though no definite information is available as to its amount. The conclusion is warranted that Canadian holdings abroad acted as a shock absorber in reducing the effects of the maladjustment in Canada's balance of payments in 1929, and that the remainder of the task was performed by an inward movement of foreign capital. In 1930 the inflow of foreign capital for investment appears to have played a larger part in the balance of payments, although there was again some repatriation of Canadian funds. The fluctuations of exchange resulting in a net inward movement of gold, the first since 1925, indicated a demand for Canadian funds. In view of the fact that the balance of payments, exclusive of the capital items, was severely against the Dominion, the only means by which this demand could be created was through a considerable influx of capital.

In 1931 the situation with regard to international transactions had undergone another considerable change. The unfavourable commodity balance was reduced to less than $4,000,000. The invisible unfavourable balance (all items exclusive of commodities, gold and capital) was $36,000,000, an adverse total of $40,000,000. There was a net gold export of $68,000,000. The gold movement, therefore, offset the deficit of $40,000,000, and, supposing no errors or omissions in the statement, allowed for a capital export of approximately $28,000,000. Available evidence indicates that this amount consisted in the main of repayment, retirement and repurchase of Canadian securities held abroad.

Declines in the amounts of various items of the statement since 1929 indicate the tremendous effect wrought by the depression upon Canada's international transactions in goods and services. Merchandise exports fell from $1,200,000,000 in 1929 to $608,000,000 in 1931. While a large proportion of the decline is explainable in terms of lower price levels, it does represent a huge falling-off in volume. An excellent illustration of the special difficulties presented to Canada by the slump in world prices, is seen in a table of index numbers of imports and exports (pp. 595-596) which shows that Canada, in common with most countries whose exports consist largely of primary products, suffered a greater reduction in the prices of her export commodities than was characteristic of the prices of imported goods. In other words, the purchasing power of Canada's exports declined drastically in 1930, export prices based on declared values in that year declining 17·8 p.c., while import prices declined only 1·4 p.c. From 1926 to 1932 export prices declined 56·2 p.c. compared to a decline in import prices of 37·6 p.c.

24.—Estimated Balance of International Payments, 1929 to 1932.

NOTE.—Figures for 1920-26 are given at pp. 601-602 of the 1929 Year Book, although these have since been somewhat revised in later estimates. Figures for 1927 and 1928 will be found at p. 591 of the 1932 Year Book.

Item.	1929.		1930.		1931.		1932.	
	Exports, Visible and Invisible.	Imports, Visible and Invisible.	Exports, Visible and Invisible.	Imports, Visible and Invisible.	Exports, Visible and Invisible.	Imports, Visible and Invisible.	Exports, Visible and Invisible.	Imports, Visible and Invisible.
	000 $	000 $	000 $	000 $	000 $	000 $	000 $	000 $
Commodity Trade — Recorded merchandise exports and imports	1,208,338	1,298,993	905,370	1,008,479	617,243	628,098	502,801	452,614
Unrecorded imports of ships	–	19,420	–	7,470	–	500	–	–
	1,208,338	1,318,413	905,370	1,015,949	617,243	628,598	502,801	452,614
Deductions for settlers' effects and other non-commercial imports	−11,679	−24,614	−10,957	−23,814	−9,328	−16,751	−6,526	−14,048
	1,196,659	1,293,799	894,413	992,135	607,915	611,847	496,275	416,566
Deduction of overvaluation	–	–	–	–	–	5,000	–	22,000
Corrected total of commodity trade	1,196,659	1,293,799	894,413	992,135	607,915	606,847	496,275	438,566
Exports and imports of gold coin and bullion	50,598	3,746	25,343	39,062	70,062	2,038	60,825	2,175
Correction for gold movement to convert to Canadian currency	–	–	–	–	–	–	7,919	–
Freight payments and receipts, n.o.p	85,541	130,855	68,815	100,908	49,670	76,528	38,864	58,864
Tourist expenditures	309,379	121,645	279,238	113,292	250,776	76,452	212,448	57,403
Interest payments and receipts	87,886	258,907	88,220	272,586	70,722	252,076	56,000	248,000
Immigrant remittances	14,036	23,385	14,000	23,000	10,051	13,110	6,080	7,127
Government expenditures and receipts	11,750	11,300	11,750	10,379	11,750	10,960	8,850	10,379
Government receipts, reparations	4,325	–	4,000	–	1,295	–	–	–
Charitable and missionary contributions	900	1,800	900	1,800	900	1,800	500	1,000
Insurance transactions	31,990	24,418	29,483	22,138	27,000	20,000	24,000	17,000
Advertising transactions	4,000	5,280	4,000	6,000	3,000	5,000	2,000	3,500
Motion picture earnings	–	3,750	–	3,750	–	3,750	–	3,250
Capital of immigrants and emigrants	14,117	11,496	11,083	9,424	5,173	3,820	4,416	3,775
Earnings of Canadian residents employed in U.S.A. (net figure)	13,725	–	3,696	–	1,857	–	750	–
Exports and imports of electrical energy[1]	–	–	–	–	–	–	–	–
Exchange, London and New York, on interest and maturity payments and receipts	–	–	–	–	–	5,000	10,000	23,750
Known omissions such as direct magazine subscriptions, artists' and entertainers' receipts, radio programs, etc	–	–	–	–	–	5,000	–	4,000
Difference between all Exports and Imports[2]	**65,475**	–	**159,533**	–	–	**27,790**	–	**72,138**
Totals	1,890,381	1,890,381	1,594,474	1,594,474	1,110,171	1,110,171	928,927	928,927

[1] Included in Commodity Trade since 1928. [2] Net capital movements and errors and omissions.

In 1932 the balance of payments statement showed credits exceeding debits by approximately $72,000,000. Of this $23,000,000 is net capital exports and $49,000,000 is attributable to errors and omissions. The net capital export was again accounted for largely by the payment of maturities and other debt-reducing transactions abroad. Outstanding features of the statement are the greater relative reduction of commodity imports as compared with exports, gold exports of $67,000,000 and tourist receipts of $212,000,000 in Canadian currency. Tourist traffic, gold and the purchase of Canadian securities to the amount of $150,000,000 were outstanding factors in bringing our international account into balance.

CHAPTER XVII.--INTERNAL TRADE.

This treatment of trade within the Dominion commences with a general statement on interprovincial trade. This is followed by sections dealing with the statistics of the grain trade and of the marketing of live stock and animal products. Statistics of cold storage facilities and of commodities in cold storage are next in order. In the latter part of the chapter will be found sections relating to various administrative services connected with trade, including: the payment of bounties; the granting of patents, copyrights and trade marks; and weights and measures, electricity and gas inspection. The concluding section of the chapter deals with the statistics of wholesale and retail merchandising.

Section 1.—Interprovincial Trade.[1]

Canada may be divided into the following five economic regions, each deriving its specific character from the predominant occupations of its people:—

1. *The Eastern Fishing, Lumbering and Mining Region,* comprising the river valley and gulf of the St. Lawrence, together with the Atlantic coast; in other words, the greater part of the Maritime Provinces, the northern part of the province of Quebec (excluding the former district of Ungava), and a portion of northern Ontario.

2. *The Eastern Agricultural and Industrial Region,* comprising the cultivated portions of the Maritime Provinces and of the provinces of Quebec and Ontario. In the latter provinces the cultivated areas extend along the banks of the St. Lawrence and its tributaries.

3. *The Central Agricultural Region,* extending from the Red River valley to the Rocky mountains and from the Canadian-United States boundary to about 56° N. lat.

4. *The Western Fishing, Mining and Lumbering Region,* comprising the western portion of the province of Alberta, the whole of British Columbia and the southern portion of Yukon.

5. *The Northern Fishing and Hunting Region,* extending from the regions of permanent settlement northwards, and from the coast of Labrador to the Pacific and to the Alaskan boundary. This vast region is sparsely inhabited by indigenous nomadic tribes engaged in fishing and hunting for their own support or for exchange with the fur-trading companies, and with individual whalers and traders who visit the region.

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[1] Revised by G. S. Wrong, B.Sc., Chief of the Transportation Branch, Dominion Bureau of Statistics.

Great differences exist between the products of these various regions; even the fisheries and lumber products of the east are quite distinct from those of British Columbia. The needs of the people throughout the country are met to a great extent by the exchange of the products of one region for those of another.

Interprovincial trade in what is now Canada had its beginning, many years before Confederation, in the exchange of the furs and lumber products of Upper and Lower Canada for the fisheries and mineral products of the Maritimes. Indeed, it was thought at the time of Confederation that the coal fields of Nova Scotia would furnish sufficient fuel for the needs of all the eastern part of the Dominion. Later, manufacturers of Ontario and Quebec found markets from one end of the Dominion to the other in exchange for the farm, mineral and other products required by large urban communities and produced principally in western and northern regions. Thus, the principle of comparative advantage is seen operating in the increased trade between the economic regions of the Dominion, a trade which is principally carried on over the railways of the country, but also largely over its waterways. A comparatively new development is the inauguration of sea transport between Eastern Canada and British Columbia *via* the Panama Canal. (See pp. 702-703.)

A monthly traffic report of the railways of Canada is published by the Transportation Branch of the Dominion Bureau of Statistics showing, for each province and for the Dominion as a whole, the total *revenue* freight traffic of all railways (not the "on company service" freight), divided into 70 classes of commodities. The data also show the quantity of each class that originated and terminated in each province, and are of use in computing the imports and exports of each province for each of the 70 classes of commodities. These statistics show rail traffic only, a limitation which should be borne in mind in connection with the trade of provinces having water transportation. Summary figures for all commodities are given in Table **1**.

The total revenue freight traffic movement on the steam railways of Canada fluctuates to a certain extent with the yield of the crops and with activity in the mining and construction industries involving heavy movements of low-grade freight. The general trend from 1921 to 1928 was upward, increasing from 83,814,436 tons of freight carried in 1921 to 119,227,758 tons in 1928. In 1929, however, a decrease to 114,600,778 tons and in 1930 a further decrease to 95,833,228 tons was reported and, with the continued industrial depression, there have been still greater decreases to 73,837,245 tons in 1931 and to 60,468,093 tons in 1932.

Statements similar to that in Table **1** may be compiled for any of the 70 commodities for which statistics are collected, showing the interprovincial trade by rail in these commodities. For details see "Summary of Monthly Traffic Reports of the Railways of Canada, 1932" obtainable from the Dominion Bureau of Statistics.

1.—Railway Revenue Freight Traffic Movement in Canada and the Provinces, for the calendar years 1931 and 1932.

Province.	Originating in Canada or Specified Province.		Received from Foreign Connections.		Total Freight Carried.	
	1931.	1932.	1931.	1932.	1931.	1932.
	tons.	tons.	tons.	tons.	tons.	tons.
Prince Edward Island	243,158	148,222	-	357	243,158	148,579
Nova Scotia	5,786,663	4,343,520	99,461	104,865	5,886,124	4,448,385
New Brunswick	1,619,468	1,187,667	552,058	424,864	2,171,526	1,612,531
Quebec	7,966,254	5,809,083	2,902,224	2,419,466	10,868,478	8,228,549
Ontario	14,181,196	10,632,413	17,567,402	13,019,600	31,748,598	23,652,013
Manitoba	3,763,454	3,308,791	148,409	118,392	3,911,863	3,427,183
Saskatchewan	6,147,783	6,095,923	312,004	271,063	6,459,787	6,366,986
Alberta	8,052,695	9,133,978	157,134	99,465	8,209,829	9,233,443
British Columbia	3,974,580	3,154,067	363,302	196,357	4,337,882	3,350,424
Totals	**51,735,251**	**43,813,664**	**22,101,994**	**16,654,429**	**73,837,245**	**60,468,093**

Province.	Terminating in Canada or Specified Province.		Delivered to Foreign Connections.		Total Freight Terminating.	
	1931.	1932.	1931.	1932.	1931.	1932.
	tons.	tons.	tons.	tons.	tons.	tons.
Prince Edward Island	259,873	202,599	34,462	17,462	294,335	220,061
Nova Scotia	4,941,677	3,702,259	321,938	347,655	5,263,615	4,049,914
New Brunswick	1,575,705	1,262,070	1,084,565	792,808	2,660,270	2,054,878
Quebec	8,694,610	6,053,625	4,045,014	3,285,285	12,739,624	9,338,910
Ontario	21,771,633	17,621,433	13,298,804	9,789,603	35,070,437	27,411,036
Manitoba	3,873,804	3,324,554	107,832	238,713	3,981,636	3,563,267
Saskatchewan	3,353,298	3,503,492	281,944	158,217	3,635,242	3,661,709
Alberta	3,271,434	2,809,910	5,059	1,702	3,276,493	2,811,612
British Columbia	3,140,846	2,224,317	2,864,018	3,758,897	6,004,864	5,983,214
Totals	**50,882,880**	**40,704,259**	**22,043,636**	**18,390,342**	**72,926,516**	**59,094,601**

Section 2.—Grain Trade Statistics.[1]

The Canada Year Book, 1922-23, contained on pp. 581-583, an historical summary of the more important points respecting the shipment, inspection and sale of Canadian grain under the Canada Grain Act, and an outline of the Canada Grain Act of 1925 appeared at p. 1017 of the 1925 Year Book. The 1929 amendments were dealt with at pp. 1047-1048 of the 1930 Year Book, and the Canada Grain Act, 1930, at p. 1101 of the 1931 Year Book.

Movement of Canadian Wheat, Crop Year 1931-32.—A résumé of the Canadian wheat movement naturally begins with a description of the crop of the Western Inspection Division. The wheat crop of 1931 marketed in the Western Division during the crop year from Aug. 1, 1931, to July 31, 1932, amounted to 302·7 million bushels. A carry-over of 114·3 million bushels from the previous crop year, together with some minor items, brought the stock of the Western Division to a total for the year of 417·0 million bushels (see the chart on p. 606 for particulars). As for distribution, 241·2 million bushels were commercially disposed of, the chief items of which were 83 million bushels exported to the United Kingdom and 95 million bushels shipped to the Eastern Division. The direct exports to the United States were 4 million bushels and to other countries 41 million bushels. The total shipments from the Western Division were thus 223·5 million bushels. The wheat used by the milling companies for the manufacture of flour amounted to about 17·6 million bushels, of which 12·4 million bushels were ground into flour for domestic consumption. The all-rail movement eastward from the Western Division, including shipments to the Ogilvie Flour Mills Co. at Fort William for grindings, was 120·2 thousand bushels. Lake shipments from Fort William and

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[1] Revised by Dr. T. W. Grindley, Chief, Agricultural Branch, Dominion Bureau of Statistics.

Port Arthur were 146·3 million bushels, 95·1 million bushels going to Canadian ports and 51·2 million to United States ports. The shipments to Canadian and American ports represented, respectively, an increase of 38·0 p.c. and a decrease of 32·1 p.c. from 1930-31. The principal Canadian lake ports were those of lake Huron and Georgian bay, with receipts of 22·2 million bushels, and Port Colborne with 24·9 million bushels. Among the United States' lake ports, Buffalo was of chief importance in the handling of Canadian wheat, with receipts by water from Port Arthur and Fort William of 50·1 million bushels. The export of wheat through Vancouver was 74·0 million bushels, as compared with 72·3 million in the previous crop year; 320,000 bushels were exported through Prince Rupert, 518,000 from Victoria, and 545,000 from Churchill. The seed requirements were estimated at 35·8 million bushels, feed for livestock and poultry at 16·9 million bushels, and the stocks at the end of the crop year were 109·0 million bushels.

The Eastern Division received during the crop year not only the eastern crop, estimated at 18·5 million bushels, but also shipments from the West aggregating 95·2 million bushels. The quantity on hand at the beginning of the crop year was 19·6 million bushels, making, with a comparatively small importation from the United States, a total stock entering the Eastern Division of 133·4 million bushels. The distribution included 22·8 million bushels carried over in store into the following year, 51·8 million bushels exported from the St. Lawrence ports, and 2·2 million bushels shipped through the winter ports of Saint John and Halifax. In addition, 33·4 million bushels were cleared for export to the United Kingdom and other countries *via* the United States Atlantic ports. The chief ports concerned with the movement of Canadian grain from both Divisions were New York, with shipments of 32·5 million bushels, Baltimore with 656,000 bushels, and Portland with 248,000.

Total exports from Canada to the United States for consumption amounted to 4·4 million bushels, to the United Kingdom 101·5 million bushels, to other countries 76·7 million bushels; 148·6 million bushels were shown to be shipped *via* Canadian ports and 71·8 million bushels *via* United States ports, after deducting 15·8 million bushels transhipped from Buffalo to Montreal and adding the same to the Canadian movement. Total exports of wheat from Canada during the crop year amounted to 182·8 million bushels.

Table **3** shows for the licence years 1932 and 1933 the number of railway stations at which elevators are placed, the number of elevators and their total storage capacity, the figures being given by provinces for each class of elevator, with a summary showing the total of all elevators for each province. The growth of Canadian elevators in number and capacity has accompanied the expansion of grain acreage in the present century. Canadian elevators in 1901 numbered 426 with a capacity of 18,329,352 bushels; in 1911 these had increased to 1,909 elevators and 105,462,700 bushels; and totals of 3,855 elevators and 231,213,620 bushels were reached in 1921. Further increases in the last few years have resulted in a total of 5,895 elevators with a capacity of 418,520,460 bushels in 1933.

Table **4** gives summary statistics of the inspections of grain for 1927-32, detailed statistics given in previous Year Books being omitted to save space. The latter may be found in the Reports on the Grain Trade of Canada.[1] Tables **5** and **6** show the shipments of grain by vessel and rail for 1931 and 1932.

Tables **7** and **8** deal with the Canadian grain handled in recent years at Eastern elevators.

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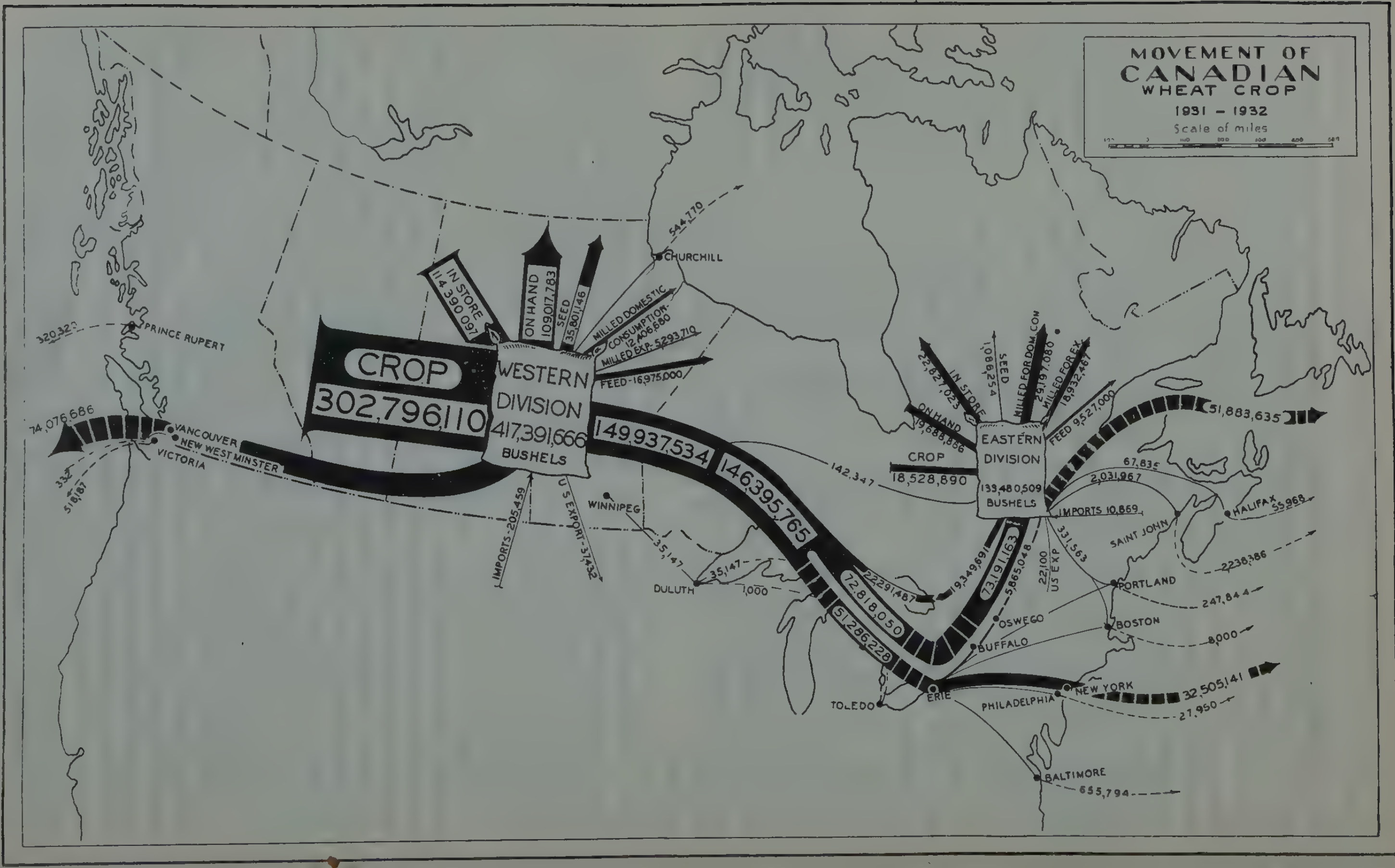
[1] The latest report is for the crop year ended July 31, 1931, and may be obtained from the Dominion Statistician.



MOVEMENT OF
CANADIAN
WHEAT CROP
1931 – 1932

Scale of miles
CROP
302,796,110
WESTERN
DIVISION
417,391,666
BUSHELS
IN STORE
114 390 097
ON HAND
109,017,783
SEED
35,801,146
MILLED DOMESTIC
CONSUMPTION-
12,406,680
MILLED EXP.-5293,710
FEED-16,975,000
IMPORTS-205,459
U S EXPORT-37,432
WINNIPEG
35,147
DULUTH
35,147
1,000
CHURCHILL
544,770
PRINCE RUPERT
320,320
74,076,686
VANCOUVER
NEW WESTMINSTER
VICTORIA
334
518,187
149,937,534
146,395,765
142,347
72,818,050
51,286,228
22,291,487
19,349,691
73,191,163
5,865,048
22,100
US EXP
331,563
EASTERN
DIVISION
133,480,509
BUSHELS
CROP
18,528,890
ON HAND
19,688,866
IN STORE
22,827,023
SEED
1,086,254
MILLED FOR DOM. CON
29,197,080
MILLED FOR EX.
18,932,467
FEED 9,527,000
51,883,635
67,835
2,031,967
IMPORTS 10,869
HALIFAX
55,968
SAINT JOHN
2238,386
PORTLAND
247,844
BOSTON
8,000
OSWEGO
BUFFALO
TOLEDO
ERIE
NEW YORK
32,505,141
PHILADELPHIA
27,950
BALTIMORE
655,794

2.—Summary of the Distribution of Grain in Canada, crop year ended July 31, 1932.

Item.	Wheat.	Oats.	Barley.	Flax.	Rye.
1. On Hand, Aug. 1, 1931	bush.	bush.	bush.	bush.	bush.
In farmers' hands	19,459,400	52,603,500	17,618,400	35,800	1,403,600
In Eastern elevators	14,344,612	1,786,218	1,070,315	16,620	1,849,404
In flour mills and mill elevators, Western Division	5,342,594	1,215,473	963,054	36,032	82,776
In country, private and terminal elevators, Western Division	28,806,758	3,457,504	1,544,512	199,051	1,189,081
In interior elevators, Western Division	1,424,986	74,553	14,746	104	4,124
In Vancouver elevators	9,576,450	114,491	24,448	–	18,792
In Prince Rupert elevators	6,861	–	–	–	–
In public and private terminals, Western Division	45,701,835	2,137,994	6,543,377	482,742	9,002,712
Afloat for unloading at Canadian ports	2,388,567	530,391	1,316,543	–	715,316
In flour mills	2,138,330	761,097	85,298	–	–
In transit	4,888,570	750,768	281,023	63,558	151,418
Totals	134,078,963	63,431,989	29,461,716	833,914	14,417,223
2. Crop, 1931	321,325,000	328,278,000	67,382,600	2,465,000	5,322,000
3. Shipped In—					
From U.S.A. and other countries	216,328	1,936,384	5,286	799,273	–
4. Total annual stocks (sum of 1, 2 and 3)	455,620,291	393,646,373	96,849,602	4,098,187	19,739,223
5. Shipped Out—					
To U.S.A.	4,473,293	36,940	9,322	245,763	207
To United Kingdom *via* Canadian and U.S.A. ports	101,564,154	6,819,881	4,758,715	4,872	2,734,404
To other countries *via* Canadian and U.S.A. ports	76,765,935	6,754,290	8,770,188	–	6,312,527
Totals	182,803,382	13,611,111	13,538,225	250,635	9,047,138
6. Milled consumption	41,603,760	6,904,105	1,033,162	1,861,664	132,852
Milled export	24,226,177	4,718,058	–	–	805
Consumed in malting and brewing establishments	–	–	4,625,979	–	–
Feed for livestock and poultry	26,502,000	–	–	–	–
7. Totals disposed of commercially (sum of 5 and 6)	275,135,319	11,622,163	19,197,366	2,112,299	9,180,795
8. Used for seed	36,887,400	32,871,000	7,515,200	226,850	1,160,700
9. In store July 31, 1932—					
In farmers' hands	7,495,800	22,823,000	3,477,000	7,100	146,000
In Eastern elevators	17,839,890	1,335,807	369,709	33,790	1,535,827
In country and private elevators, Western Division	27,499,002	731,029	384,330	126,113	502,278
In flour mills and mill elevators	6,009,490	733,000	966,123	47,266	30,385
In interior terminals, Western Div.	102,412	4,444	4,121	1,030	263
In Vancouver and New Westminster	8,530,406	477,097	140,881	199	7,983
In Victoria and Prince Rupert	1,174,882	–	–	–	–
In Churchill	2,290,508	–	–	–	–
In public and private terminals, Fort William and Port Arthur	48,683,128	2,727,871	1,296,802	1,040,165	2,542,044
Afloat for unloading at Canadian Ports	6,597,843	252,043	378,118	35,533	544,264
In flour mills	2,895,905	476,995	78,735	–	37,836
In transit	2,725,540	288,033	99,836	30,162	71,835
Totals	131,844,806	29,849,319	7,195,655	1,321,358	5,418,715
10. Totals accounted for (sum 7, 8 and 9)	443,867,525	87,953,593	33,908,221	3,660,507	15,760,210
11. Losses in cleaning	5,976,645	1,345,939	188,671	235,654	125,067
12. Grain, not merchantable	2,826,100	8,044,000	699,200	65,300	49,500
13. Balance, merchantable grain fed on farms or otherwise consumed in and moved out of Canada through other channels	2,950,021	296,302,841	62,053,510	136,726	3,804,446
14. Totals (sum 10 to 13)	455,620,291	393,646,373	96,849,602	4,098,187	19,739,223
15. Amounts inspected	259,051,000	42,075,958	13,339,450	1,913,000	5,932,607
16. Per cent of crop inspected	80·6	12·8	19·8	77·6	11·1
17. Per cent of commercial grain inspected (line 15 of 10)	58·4	47·8	39·3	52·3	37·6
18. Commercial grain from season's crop (9 and 7-1-3)	272,684,834	−10,285,780	−3,063,981	1,800,470	182,287
19. Per cent of crops commercial grain (line 18 of 2)	84·86	–	–	73·04	3·42
20. Values of crops $	129,105,000	71,538,000	15,794,000	1,282,000	1,564,000

3.—Number and Storage Capacity of Canadian Grain Elevators, licence years 1932 and 1933.

NOTE.—Detailed statistics of elevators for the years 1901 to 1918 are given in the 1921 Year Book, pp. 507-509, and the figures for 1919 to 1924 will be found in the 1924 Year Book, pp. 549–550. For 1925 and 1926 see p. 616 of the 1927–28 Year Book, for 1927 and 1928 see p. 609 of the 1929 Year Book, for 1929, p. 624 of the 1931 Year Book and 1930 and 1931, p. 508 of the 1932 Year Book.

Division, Elevator and Province.	1932.		1933.	
	Elevators.	Capacity.	Elevators.	Capacity.
WESTERN DIVISION.	No.	bush.	No.	bush.
Country Elevators—				
Manitoba	733	23,375,300	723	23,015,850
Saskatchewan	3,236	103,096,350	3,238	102,274,050
Alberta	1,749	65,243,900	1,769	66,481,900
British Columbia	11	369,000	10	349,000
Ontario	1	40,000	1	40,000
Totals, Country Elevators	5,730	192,124,550	5,741	192,160,800
Private Country Elevators—				
Manitoba	3	50,000	3	100,000
Saskatchewan	3	66,500	2	53,000
Alberta	4	140,000	4	140,000
Totals, Private Country Elevators	10	256,500	9	293,000
Mill Elevators—				
Manitoba	10	181,500	6	167,500
Saskatchewan	9	106,500	10	139,000
Alberta	5	152,000	3	63,000
British Columbia	10	800,000	10	442,000
Ontario	1	185,000	1	185,000
Totals, Mill Elevators	35	1,425,000	30	996,500
Private Terminal—				
Ontario	7	1,940,000	7	1,940,000
Manitoba	14	5,317,450	13	4,292,450
Saskatchewan	6	4,585,550	6	4,585,500
Alberta	14	4,075,000	15	4,095,000
British Columbia	1	200,000	2	570,000
Totals, Private Terminals	42	16,118,000	43	15,482,950
Public Terminal—				
Ontario	2	9,000,000	2	9,000,000
Manitoba	1	2,500,000	–	–
Saskatchewan	2	11,000,000	2	11,000,000
Alberta	3	6,250,000	3	6,250,000
British Columbia	3	2,135,000	2	1,900,000
Totals, Public Terminals	11	30,885,000	9	28,150,000
Semi-Public Terminal—				
Ontario	26	83,657,210	25	83,592,210
Manitoba	–	–	2	3,500,000
British Columbia	7	17,058,000	8	18,758,000
Totals, Semi-Public Terminals	33	100,715,210	35	105,850,210
EASTERN DIVISION.				
Eastern Elevators—				
Ontario	18	50,100,000	18	50,100,000
Quebec	7	21,787,000	7	21,787,000
New Brunswick	2	1,500,000	2	1,500,000
Nova Scotia	1	2,200,000	1	2,200,000
Totals, Eastern Division	28	75,587,000	28	75,587,000
Summary by Provinces—				
Nova Scotia	1	2,200,000	1	2,200,000
New Brunswick	2	1,500,000	2	1,500,000
Quebec	7	21,787,000	7	21,787,000
Ontario	55	144,922,210	54	144,857,210
Manitoba	761	31,424,250	747	31,075,800
Saskatchewan	3,256	118,854,900	3,258	118,051,550
Alberta	1,775	75,860,900	1,794	77,029,900
British Columbia	32	20,562,000	32	22,019,000
Grand Totals for Canada	**5,889**	**417,111,260**	**5,895**	**418,520,460**

4.—Quantities of Canadian Grain Inspected during the crop years ended July 31, 1927-32.

Grain.	1926–27.			1927–28.		
	Western Division.	Eastern Division.	Total.	Western Division.	Eastern Division.	Total.
	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat	335,994,825	272,832	336,267,657	396,851,400	12,889,583	409,740,983
Winter wheat	26,500	550,888	577,388	308,880	311,247	620,127
Totals, Wheat	336,021,325	823,720	336,845,045	397,160,280	13,200,830	410,361,110
Oats	27,463,800	1,830,717	29,294,517	38,576,160	1,122,381	39,698,541
Barley	40,537,500	7,294,055	47,831,555	27,834,900	2,067,362	29,902,262
Flax	4,703,650	–	4,703,650	4,116,280	–	4,116,280
Rye	7,849,000	8,664,908	16,513,908	12,359,880	8,727,633	21,087,513
Corn	3,500	–	3,500	7,500	–	7,500
Buckwheat	32,000	226,586	258,586	8,000	206,498	214,498
Peas	–	10,560	10,560	–	5,358	5,358
Speltz	1,000	–	1,000	–	–	–
Screenings	55,000	–	55,000	127,000	–	127,000
Mixed grains	930,900	–	930,900	1,212,600	1,800	1,214,400
Totals, Grain	**417,597,675**	**18,850,546**	**436,448,221**	**481,402,600**	**25,331,862**	**506,734,462**

Grain.	1928–29.			1929–30.		
Spring wheat	465,393,810	23,218,666	488,612 476	219,201,680	9,221,538	228,423,218
Winter wheat	856,190	168,206	1,024,396	798,320	264,000	1,062,320
Totals, Wheat	466,250,000	23,386,872	489,636,872	220,000,000	9,485,538	229,485,538
Oats	44,756,500	1,663,425	46,419,925	16,965,000	465,281	17,430,281
Barley	51,512,000	1,053,564	52,565,564	22,845,000	35,000	22,880,000
Flax	2,991,600	–	2,991,600	1,540,000	–	1,540,000
Rye	8,627,000	7,233,431	15,860,431	5,380,000	747,656	6,127,656
Corn	–	–	–	–	–	–
Buckwheat	1,000	225,572	226,572	2,000	53,800	55,800
Peas	–	–	–	–	–	–
Speltz	–	–	–	–	–	–
Screenings	355,000	–	355,000	105,000	–	105,000
Mixed grains	2,550,500	–	2,550,500	556,150	–	556,150
Totals, Grain	**577,043,600**	**33,562,864**	**610,606,464**	**267,393,150**	**10,787,275**	**278,180,425**

Grain.	1930–31.			1931–32.		
Spring wheat	288,262,434	8,604,368	296,866,802	258,719,120	15,000	258,734,120
Winter wheat	432,566	231,135	663,701	146,880	170,000	316,880
Totals, Wheat	288,695,000	8,835,503	297,530,503	258,866,000	185,000	259,051,000
Oats	32,235,000	527,159	32,762,159	41,510,000	565,958	42,075,958
Barley	23,532,000	79,800	23,611.800	13,264,000	75,450	13,339,450
Flax	4,131,500	–	4,131,500	1,913,000	–	1,913,000
Rye	7,750,000	1,828,771	9,578,771	3,000,000	2,932,607	5,932,607
Corn	–	–	–	–	6,600	6,600
Buckwheat	4,000	235,700	239,700	4,000	238,496	242,496
Peas	–	–	–	–	1,000	1,000
Speltz	–	–	–	–	–	–
Screenings	–	–	–	–	–	–
Mixed grains	294,000	–	294,000	244,500	–	244,500
Totals, Grain	**356,641,500**	**11,506,933**	**368,148,433**	**318,801,500**	**4,005,111**	**322,806,111**

5.—Shipments of Grain by Vessels from Fort William and Port Arthur for the navigation seasons 1931 and 1932.

Grain.	1931.			1932.		
	To Canadian Ports.	To U. S. Ports.	Total Shipments.	To Canadian Ports.	To U. S. Ports.	Total Shipments.
Wheat................bush.	78,370,500	67,646,510	146,017,010	118,539,851	47,357,395	165,002,304
Oats..................bush.	16,482,412	837,110	17,319,522	12,267,186	31,442	12,298,568
Barley................bush.	15,503,856	5,637,569	21,141,416	8,282,333	129,058	8,411,391
Flaxseed..............bush.	1,200,061	1,041,600	2,241,661	907,012	362,579	1,269,591
Rye...................bush.	1,778,221	1,808,671	3,586,892	7,479,900	1,124,154	8,604,054
Oat scalpings.........bush.	–	–	–	–	–	–
Totals........bush.	**113,335,050**	**76,971,451**	**190,306,501**	**147,476,222**	**49,004,628**	**196,480,850**
Screenings............tons	14,677	22,566	37,243	16,347	2,220	18,567

6.—Shipments of Grain by Lake and All-Rail Routes from Fort William and Port Arthur for the crop years ended July 31, 1931 and 1932.

Grain.	1930–31.			1931–32.		
	Lake.	Rail.	Total.	Lake.	Rail.	Total.
	bush.	bush.	bush.	bush.	bush.	bush.
Wheat—						
No. 1 Hard..............	15,185,676	623	15,186,299	14,199,785	–	14,199,785
No. 1 Northern...........	76,723,861	667	76,724,528	39,589,660	1,915	39,591,575
No. 2 Northern...........	39,762,472	385	39,762,857	47,068,695	1,500	47,070,195
No. 3 Northern...........	9,289,640	7,500	9,297,140	24,424,392	4,560	24,428,952
No. 4....................	5,851,921	517	5,852,438	8,104,082	8,973	8,113,055
Other grades.............	28,019,715	290,186	28,309,901	12,997,373	97,359	13,094,732
Totals, Wheat........	**174,833,295**	**299,878**	**175,133,163**	**146,383,987**	**114,307**	**146,398,294**
Oats.....................	15,910,805	1,214,064	17,124,869	12,808,146	492,588	13,300,734
Barley...................	25,000,470	58,767	25,059,237	11,150,823	12,302	11,163,125
Flaxseed.................	3,353,963	197,882	3,551,845	1,103,455	5,089	1,108,544
Rye......................	3,240,022	52	3,240,074	9,730,596	4,290	9,734,886
Feed oats, shorts........	341,865	75,780	417,645	315,416	4,500	319,916
Mixed grains.............	245,546	13,431	258,977	54,082	10,517	64,599
Totals, Other Grain.	**48,092,671**	**1,559,976**	**49,652,647**	**35,162,518**	**529,286**	**35,691,804**

7.—Canadian Grain Handled at Eastern Elevators, by crop years ended July 31, 1924-32.

Year.	Wheat.	Oats.	Barley.	Flaxseed.	Rye.	Total Grain.
	bush.	bush.	bush.	bush.	bush.	bush.
Receipts—						
1923–1924..................	223,719,604	49,154,956	15,562,501	653,807	3,377,790	292,468,658
1924–1925..................	153,399,076	54,899,163	15,991,065	1,506,975	6,229,093	232,025,372
1925–1926..................	215,549,103	62,779,106	32,688,079	1,287,532	2,541,379	314,845,199
1926–1927..................	198,210,174	24,508,721	32,791,627	1,638,413	4,078,293	261,227,228
1927–1928..................	208,212,325	27,519,265	17,123,636	2,198,833	10,777,836	265,831,895
1928–1929..................	289,646,130	38,856,198	27,046,998	1,988,872	10,945,419	368,483,617
1929–1930..................	132,356,863	15,932,469	8,381,291	658,303	3,226,137	160,555,063
1930–1931..................	178,120,479	20,874,442	37,555,371	1,710,059	6,226,473	244,486,824
1931–1932..................						
Shipments—						
1923–1924..................	216,711,059	44,512,029	15,297,057	604,501	3,237,745	280,362,391
1924–1925..................	148,380,135	52,213,123	15,333,397	1,449,328	6,059,319	223,435,302
1925–1926..................	205,741,857	57,670,028	31,083,209	1,257,545	2,491,492	298,244,131
1926–1927..................	189,398,463	22,852,198	32,277,421	1,577,210	3,975,862	250,082,400[1]
1927–1928..................	192,649,455	25,415,986	17,014,366	2,119,837	10,268,711	247,468,355
1928–1929..................	270,139,952	34,671,277	25,443,949	1,971,246	9,774,481	342,000,905
1929–1930..................	111,077,966	13,372,999	6,734,676	657,101	1,654,237	133,496,979
1930–1931..................	163,730.581	19,086,592	36,485,055	1,693,439	4,378,874	225,374,541
1931–1932..................						

[1] Includes 1,246 bushels of buckwheat.

8.—Canadian Grain Handled at Eastern Elevators, by Classes of Ports, during the crop year ended July 31, 1932.

Ports.	Wheat	Oats.	Barley.	Flaxseed.	Rye.	Total.
	bush.	bush.	bush.	bush.	bush.	bush.
Lake Huron and Georgian Bay Ports—						
On hand, Aug. 1, 1931	2,973,120	644,660	16,930	15,897	98,281	3,748,888
Receipts—Water	22,291,487	2,913,228	374,488	286,189	736,955	26,602,347
Total handled	25,264,607	3,557,888	391,418	302,086	835,236	30,351,235
Shipments—Water	725,827	73,771	49,651	-	-	849,240
Rail	19,349,691	2,901,377	315,949	287,283	835,236	23,689,536
Total shipments	20,075,518	2,975,148	365,600	287,283	835,236	24,538,785
In store, July 31, 1932	5,189,089	582,740	25,818	14,803	-	5,812,450
Lower Lake Ports—						
On hand, Aug. 1, 1931	2,190,880	270,077	269,110	-	422,901	3,152,968
Receipts—Water	42,020,320	2,337,074	4,102,930	285,213	3,754,167	52,499,704
Rail	151,423	69,895	11,272	-	82,700	315,290
Total handled	44,362,623	2,677,046	4,383,312	285,213	4,259,768	55,967,962
Shipments—Water	29,977,727	1,106,435	3,530,457	81,709	3,905,873	38,602,201
Rail	10,509,973	1,364,116	800,940	180,017	304,442	13,159,488
Total shipments	40,487,700	2,470,551	4,331,397	261,726	4,210,315	51,761,689
In store, July 31, 1932	3,874,923	206,495	51,915	23,487	49,453	4,206,273
St. Lawrence Ports—						
On hand, Aug. 1, 1931	9,216,268	873,110	784,253	723	719,266	11,593,620
Receipts—Water	60,652,307	9,289,018	11,121,983	424,917	7,771,815	89,260,040
Rail	9,789,770	173,984	78,427	-	504,029	10,546,210
Total handled	79,658,345	10,336,112	11,984,663	425,640	8,995,110	111,399,870
Shipments—Water	62,279,027	5,567,771	10,486,841	-	7,136,580	85,470,219
Rail	8,658,805	4,230,106	1,272,933	425,640	436,012	15,023,496
Total shipments	70,937,832	9,797,877	11,759,774	425,640	7,572,592	100,493,715
In store, July 31, 1932	8,720,513	538,235	224,889	-	1,422,518	10,906,155
Seaboard ports—						
On hand, Aug. 1, 1931	9,646	-	18	-	607,252	616,916
Receipts—Water	-	-	-	-	-	-
Rail	2,099,802	492,888	350,326	-	513,500	3,456,516
Total handled	2,109,448	492,888	350,344	-	1,120,752	4,073,432
Shipments—Water	2,109,083	447,946	350,326	-	1,120,652	4,028,007
Rail	365	14,765	-	-	100	15,230
Total shipments	2,109,448	462,711	350,326	-	1,120,752	4,043,237
In store, July 31, 1932	-	30,177	18	-	-	30,195

[1] Buckwheat.

Flour-milling in 1931.—The flour and grist mills industry in Canada in 1931 numbered 1,265 operating establishments, with a capital investment of $61,069,192 and a total daily capacity of 112,048 barrels of flour. The mills were distributed by provinces as shown in Table 9. Statistics of their employees, value of products, etc., for the latest year available will be found in Table 7 of the chapter on manufactures, p. 424 of this volume.

9.—Flour Mills of Canada, with their Equipment and Capacity, 1931, with Totals for 1930.

Province.	Flour and Grist Mills.	Chopping Mills.	Total Mills.	Rolls.	Stones.	Capacity of Flour Mills.
	No.	No.	No.	pairs.	pairs.	brl. per day.
Prince Edward Island	15	3	18	74	12	706
Nova Scotia	6	10	16	18	5	168
New Brunswick	9	21	30	66	2	526
Quebec	77	275	352	585	153	13,614
Ontario	141	529	670	2,228	52	55,427
Manitoba	29	9	38	554	7	12,090
Saskatchewan	45	15	60	522	15	13,957
Alberta	44	31	75	699	1	14,166
British Columbia	6	-	6	79	6	1,394
Totals, 1931	**372**	**893**	**1,265**	**4,825**	**253**	**112,048**
Totals, 1930	**383**	**894**	**1,277**	**5,119**	**248**	**117,407**

Section 3.—Marketing of Live Stock and Animal Products.[1]

The estimated value of farm live stock and poultry in Canada in 1931 was $511,438,000, or 120·3 p.c. of the value of field crops grown during the year. In gross value of product the slaughtering and meat-packing industry, which is dependent chiefly on animal husbandry for its materials, has during recent years been one of the most important single manufacturing industries in Canada.

The Canada Year Book, 1922-23, contained on pages 594-595 a brief historical description of the development and present position of the live-stock industry in the Dominion, with statistics of farm animals compiled from the decennial censuses, 1871 to 1931. A summary of this data is given in Table **10.**

10.—Animals in Canada and Animals Killed or Sold by Farmers in Canada, by census years 1871-1931.

Year.	Animals in Canada.			Animals Killed or Sold and Wool Sold.			
	Cattle.[1]	Sheep.	Swine.	Cattle.[1]	Sheep.	Swine.	Wool.
	No.	No.	No.	No.	No.	No.	lb.
1871	2,484,655	3,155,509	1,366,083	507,725	1,557,430	1,216,097	11,103,480
1881	3,382,396	3,048,678	1,207,619	657,681	1,496,465	1,302,503	11,300,736
1891	3,997,023	2,563,781	1,733,850	957,737	1,464,172	1,791,104	10,031,970
1901	5,576,451	2,510,239	2,353,828	1,086,353	1,329,141	2,497,636	10,657,597
1911[2]	6,526,083	2,174,300	3,634,778	1,752,792[3]	949,039[3]	2,771,755[3]	6,933,955
1921[2]	8,519,484	3,203,966	3,404,730	1,616,626[3]	1,027,969[3]	1,779,257[3]	11,338,268
1931[2]	7,990,947	3,608,540	4,716,761	–	–	–	–

[1] Figures for 1871–91 do not include work oxen.

[2] Census taken as of June 1, while previous censuses were taken in April, so that a greater number of young animals is included.

[3] Animals slaughtered on farms were not included. The following figures are comparable with data given for the previous years (the 1911 amounts being partly estimated).—

	Cattle.	Sheep.	Swine.
1911	1,915,059	1,097,015	4,282,624
1921	2,097,390	1,217,987	2,972,331

In Table **11** are given statistics showing the numbers of animals on farms for the years 1921 to 1932, expressed as percentages of the average numbers for the quinquennium 1921-25.

11.—Index Numbers of Animals on Farms in Canada, calendar years 1921-32.

(Average number for 1921-25=100.)

Year.	Animals on Farms.				
	Horses.	Milch Cows.	Other Cattle.	Sheep.	Swine.
1921	105·1	99·9	110·6	121·4	88·9
1922	100·6	100·2	102·2	107·8	90·3
1923	97·3	97·8	95·5	91·0	101·6
1924	98·9	99·7	98·0	88·7	117·0
1925	98·0	102·5	93·7	91·0	102·1
1926	93·7	102·7	80·9	103·8	100·6
1927	94·3	103·8	90·1	107·8	108·3
1928	93·1	101·1	85·3	112·9	103·8
1929	93·1	98·5	87·9	120·1	101·1
1930	90·8	98·5	89·8	122·1	92·3
1931	86·3	90·0	79·1	119·2	108·8
1932	85·2	96·9	83·6	120·4	107·0

Live-Stock Marketings, 1931.—The numbers of cattle and hogs sold at stockyards showed increases of 39,953 and 180,143 respectively in 1931 as compared with 1930. Cattle sold numbered 646,442 in 1931, 606,489 in 1930, 799,435 in 1929, 875,428 in 1928 and 958,872 in 1927. The total numbers of hogs sold were 1,084,582 in 1931, 904,439 in 1930, 1,060,542 in 1929, 1,090,316 in 1928, and 1,117,555 in 1927. Sales of calves decreased from 311,756 in 1930 to 307,082 in 1931, and sheep sales increased from 483,645 in 1930 to 527,102 in 1931.

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[1] Revised by Dr. T. W. Grindley, Chief, Agricultural Branch, Dominion Bureau of Statistics. For more detailed information on this subject see "Live Stock and Animal Products Statistics", published annually by the Dominion Bureau of Statistics, also "Live Stock Market and Meat Trade Review", published annually by the Live Stock Branch of the Dominion Department of Agriculture. See also the material in Chapter VIII under the heading "Farm Live Stock and Poultry".

Table **12** shows the receipts for sale at the various stockyards and a partial disposition of the live stock sold in 1930 and 1931.

12.—Total Receipts of Live Stock and Disposition of Slaughter and Store Stock at Principal Markets in Canada, calendar years 1930 and 1931.

Market and Classification.	1930.				1931.			
	Cattle.	Calves.	Hogs.	Sheep and Lambs.	Cattle.	Calves.	Hogs.	Sheep and Lambs.
	No.	No.	No.	No.	No.	No.	No.	No.
Toronto—								
Receipts (Totals)................	276,184	103,415	195,557	208,378	277,129	105,399	194,508	219,960
Shipments—								
1. Slaughter Stock to Packers..	200,638	49,925	181,815	159,469	189,996	52,423	169,400	166,227
2. Slaughter Stock to Butchers	24,097	22,586	8,470	40,273	29,645	32,401	18,667	42,995
3. Store Stock to Country Points....................	45,681	10,943	-	-	50,234	8,827	-	-
Montreal (Pt. St. Charles)—								
Receipts (Totals)................	52,246	107,903	144,669	136,380	52,645	102,566	184,683	147,168
Shipments—								
1. Slaughter Stock to Packers..	44,213	45,657	86,807	92,812	44,848	36,217	110,441	102,929
2. Slaughter Stock to Butchers	14,061	62,726	86,357	39,408	13,015	64,357	106,990	44,301
3. Store Stock to Country Points....................	-	747	-	-	-	-	-	-
Montreal (East End)—								
Receipts (Totals)................	11,697	28,302	18,734	12,206	12,341	30,420	24,660	14,397
Shipments—								
1. Slaughter Stock to Packers.	3,826	7,679	2,949	4,411	2,586	3,741	5,923	4,797
2. Slaughter Stock to Butchers	7,548	21,835	15,841	7,781	10,085	26,014	21,002	9,400
3. Store Stock to Country Points....................	-	-	-	-	-	-	-	-
Winnipeg—								
Receipts (Totals)................	155,623	41,531	242,003	60,768	200,935	45,828	358,146	81,500
Shipments—								
1. Slaughter Stock to Packers.	91,816	30,569	114,251	52,665	121,200	36,022	268,615	77,140
2. Slaughter Stock to Butchers	3,378	3,815	9,539	2,469	335	299	1,149	68
3. Store Stock to Country Points....................	36,121	3,033	-	-	38,752	3,825	-	-
Calgary—								
Receipts (Totals)................	47,632	13,101	95,091	23,780	42,261	8,670	83,742	20,878
Shipments—								
1. Slaughter Stock to Packers.	48,277	352	86,015	19,489	38,330	220	73,813	17,670
2. Slaughter Stock to Butchers	2,211	85	350	166	2,759	4	474	680
3. Store Stock to Country Points....................	8,381	-	-	-	8,645	-	-	-
Edmonton—								
Receipts (Totals)................	33,884	11,425	85,436	15,118	34,190	8,678	101,062	14,289
Shipments—								
1. Slaughter Stock to Packers.	21,096	8,779	59,116	9,156	20,357	6,345	73,320	11,068
2. Slaughter Stock to Butchers	2,356	1,896	5,404	4,454	1,304	718	4,159	2,167
3. Store Stock to Country Points....................	9,741	707	-	-	9,565	1,355	-	-
Prince Albert—								
Receipts (Totals)................	3,722	563	24,236	898	3,233	415	26,140	935
Shipments—								
1. Slaughter Stock to Packers.	1,726	294	22,530	620	1,697	278	24,022	878
2. Slaughter Stock to Butchers	174	42	140	72	220	65	373	43
3. Store Stock to Country Points....................	1,735	177	-	-	1,111	85	-	-
Moose Jaw—								
Receipts (Totals)................	17,402	3,684	37,245	23,352	13,833	2,900	30,306	23,092
Shipments—								
1. Slaughter Stock to Packers.	10,340	2,063	27,575	13,037	9,767	1,414	21,878	14,953
2. Slaughter Stock to Butchers	46	22	35	6	34	17	62	57
3. Store Stock to Country Points....................	5,466	1,350	-	-	3,301	1,397	-	-
Saskatoon—								
Receipts (Totals)................	8,099	1,832	61,468	2,765	9,875	2,206	81,335	4,883
Shipments—								
1. Slaughter Stock to Packers.	3,857	1,101	46,926	1,994	3,757	1,357	69,203	3,497
2. Slaughter Stock to Butchers	1,820	587	3,218	528	1,554	430	2,189	703
3. Store Stock to Country Points....................	1,709	65	-	-	2,004	129	-	-

The interprovincial and export movement of live stock in 1931 shows a falling-off in calves, but an increase in cattle, swine and sheep. Total shipments in 1931 with comparative figures for 1930 in parentheses were as follows: cattle 329,271 (258,365); calves 94,906 (105,966); swine 815,275 (696,258); and sheep 158,830 (144,018). Saskatchewan was the largest shipper in the aggregate and also the largest shipper of cattle, reporting 106,827 cattle, 18,821 calves, 261,258 swine and 38,619 sheep. Alberta led in swine and sheep shipments and Ontario in shipments of calves.

The marketings of live stock through stockyards, by direct shipment to packers, or by export according to provinces of origin for the calendar year 1931 are given in Table **13.** In Table **14** are given the statistics of the grading of animals from five provinces marketed through the stockyards in 1931.

13.—Live Stock from Several Provinces of Canada, Marketed through Stockyards, Packers, etc., calendar year 1931.

Live Stock.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
Cattle—							
Totals to stockyards	353	26,888	281,116	91,776	129,376	96,372	625,881
Direct to packers	–	202	22,736	2,823	5,062	19,742	50,565
Direct for export	1,140	1,259	11,413	537	2,481	6,220	23,050
Totals, Cattle	**1,493**	**28,349**	**315,265**	**95,136**	**136,919**	**122,334**	**699,496**
Calves—							
Totals to stockyards	1,343	85,917	145,127	26,760	24,881	18,157	302,185
Direct to packers	–	13	16,899	858	1,473	14,848	34,091
Direct for export	191	242	1,739	–	53	8	2,233
Totals, Calves	**1,534**	**86,172**	**163,765**	**27,618**	**26,407**	**33,013**	**338,509**
Hogs—							
Totals to stockyards	2,878	84,758	283,347	173,257	333,602	295,588	1,173,430
Direct to packers	16,091	27,128	837,815	95,453	65,248	427,754	1,469,489
Direct for export	412	31	–	–	–	10	453
Totals, Hogs	**19,381**	**111,917**	**1,121,162**	**268,710**	**398,850**	**723,352**	**2,643,372**
Sheep—							
Totals to stockyards	14,819	146,039	213,506	47,216	54,027	67,553	543,160
Direct to packers	190	–	51,806	3,817	4,647	41,071	101,531
Direct for export	170	2	666	–	–	162	1,000
Totals, Sheep	**15,179**	**146,041**	**265,978**	**51,033**	**58,674**	**108,786**	**645,691**
Store cattle purchased	–	929	91,790	12,651	9,321	15,522	130,213

14.—Grading of the Live Stock from several Provinces of Canada, Marketed at the Stockyards, calendar year 1931.

Live Stock and Grade.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
1. Cattle—							
Steers up to 1,050 lb.—							
Good and choice	–	199	16,353	6,206	7,760	8,794	39,312
Medium	28	1,074	39,380	10,295	14,855	7,657	73,289
Common	21	2,863	14,293	7,404	11,367	6,789	42,737
Steers over 1,050 lb.—							
Good and choice	114	1,469	21,248	4,428	8,024	11,635	46,918
Medium	55	1,516	25,735	3,827	8,302	7,294	46,729
Common	29	423	2,786	907	1,805	3,649	9,599
Heifers—							
Good and choice	7	237	11,677	4,878	6,743	3,454	26,996
Medium	8	429	33,049	5,545	7,981	2,769	49,781
Common	11	1,099	12,012	3,088	3,765	2,357	22,332
Fed Calves—							
Good and choice	1	26	7,415	2,157	2,448	2,027	14,074
Medium	7	28	7,502	1,443	1,834	3,163	13,977
Cows—							
Good	23	1,659	13,510	3,818	4,876	5,563	29,449
Medium	31	3,216	17,341	6,779	6,294	2,403	36,064
Common	3	1,800	12,614	2,543	2,308	1,509	20,777
Canners and Cutters	3	5,101	10,387	1,282	1,104	908	18,785
Bulls—							
Good	4	411	2,794	700	771	518	5,198
Common	8	2,584	6,834	912	1,152	724	12,214
Stocker and Feeder Steers—							
Good	–	298	8,803	10,381	15,772	7,741	42,995
Common	–	1,012	12,502	8,907	11,827	6,832	41,080
Stock Cows and Heifers—							
Good	–	–	40	2,756	3,576	3,222	9,594
Common	–	8	41	2,017	2,565	1,565	6,196
Milkers and Springers	–	1,095	3,807	617	428	291	6,238
Unclassified	–	341	993	886	3,819	5,508	11,547
Totals	**353**	**26,888**	**281,116**	**91,776**	**129,376**	**96,372**	**625,881**
2. Calves, Veal—							
Good and choice	15	7,212	49,080	11,520	9,373	7,928	85,128
Common and medium	152	36,933	87,453	15,237	15,231	10,163	165,169
Grass	1,176	41,772	8,594	3	277	66	51,888
Totals	**1,343**	**85,917**	**145,127**	**26,760**	**24,881**	**18,157**	**302,185**
3. Hogs—							
Select bacon	141	5,652	66,737	25,626	29,387	22,878	150,421
Bacon	594	20,585	131,319	63,888	95,944	83,191	395,521
Butchers	935	31,561	54,933	27,201	98,578	150,903	364,111
Heavies	183	3,174	6,401	6,856	14,200	8,158	38,972
Extra heavies	102	1,927	1,582	3,584	7,216	1,948	16,359
Lights and feeders	736	20,294	16,505	36,704	68,016	22,228	164,483
Sows No. 1	76	631	1,220	5,902	14,507	3,250	25,586
Sows No. 2	82	762	4,057	3,034	4,678	2,716	15,329
Roughs	7	96	226	240	636	87	1,292
Stags	22	76	367	222	440	229	1,356
Totals	**2,878**	**84,758**	**283,347**	**173,257**	**333,602**	**295,588**	**1,173,430**
4. Lambs and Sheep—							
Lambs—							
Good handyweights	7,124	80,739	162,486	29,090	25,185	31,257	335,881
Good heavies	359	7,219	4,647	2,583	11,868	4,117	30,793
Common, all weights	5,412	34,528	25,413	12,580	6,433	6,023	90,389
Bucks	1,404	14,837	3,057	139	471	178	20,086
Sheep—							
Good heavies	16	808	4,744	83	1,126	356	7,133
Good handyweights	203	4,411	10,036	1,662	1,692	3,243	21,247
Common	301	3,221	2,982	1,074	4,935	1,317	13,830
Unclassified	–	276	141	5	2,317	21,062	23,801
Totals	**14,819**	**146,039**	**213,506**	**47,216**	**54,027**	**67,553**	**543,160**

Slaughtering and Meat Packing.—This industry has become one of the most important branches of manufacturing in Canada. Its growth, shown by the statistics of Table **15**, has been accompanied by a concentration of the major part of the production of the industry into a comparatively small number of large establishments, thereby facilitating the utilization of by-products and greater efficiency of operation. In 1931, the latest year recorded, the large increase in the number of establishments is due to the inclusion of wholesale butchers operating small plants engaged in slaughtering only. These small establishments did not add more than 4 p.c. to the total output of the industry in 1931. The numbers of live stock slaughtered at Canadian inspected establishments in 1931 and 1932 are shown in Table **16.**

15.—Principal Statistics of the Slaughtering and Meat-Packing Industry of Canada, decennially 1871-1921, annually 1926-31.

Description.	1871.	1881.	1891.	1901.[1]	1911.[1]	1921.
Establishments.........No.	193	203	527	57	80	84
Capital invested........ $	419,325	1,449,677	2,173,077	5,395,162	15,321,088	58,459,555
Employees.............No.	841	852	1,690	2,416	4,214	9,711
Salaries and wages...... $	145,376	209,483	503,053	1,020,164	2,685.518	13,547,778
Cost of materials....... $	2,942,786	3,163,576	5,554,246	19,520,058	40,951,761	113,389,835
Value of products....... $	3,799,552	4,084,133	7,125,831	22,217,984	48,527.076	153,136,289
Description.	**1926.**	**1927.**	**1928.**	**1929.**	**1930.**	**1931.**
Establishments.........No.	73	76	75	74	76	147[2]
Capital invested........ $	55,712,724	60,612,029	66,198,507	67,777,803	60,778,996	62,481,905
Employees.............No.	10,685	11,048	11,244	10,762	9,290	9,294
Salaries and wages...... $	13,757,638	14,551,250	14,242,362	13,998,716	12,114,667	11,626,678
Cost of materials....... $	139,200,096	133,076,361	142,396,342	151,814,517	129,004,327	91,276,842
Value of products....... $	167,127,091	167,220,892	174,096,419	185,842,902	164,029,953	117,596,697

[1] Figures for this year cover establishments employing five hands and over only.

[2] The increase in 1931 is due to the inclusion of a large number of wholesale butchers engaged in slaughtering only. The combined output of their small establishments did not amount to more than 4 p.c. of the whole industry in 1931.

16.—Live Stock Slaughtered at Canadian Inspected Establishments, by months, 1931 and 1932.

Month.	1931.				1932.			
	Cattle.	Calves.	Sheep.	Hogs.	Cattle.	Calves.	Sheep.	Hogs.
	No.	No.	No.	No.	No.	No.	No.	No.
January...........	53,193	15,383	37,301	165.902	47,875	17,305	48,272	263,785
February..........	40,979	17,828	32,443	161,161	39,379	22,679	34,712	239,921
March.............	47,917	36,594	31,553	153,883	44,505	43,253	37,105	232,875
April..............	48,107	52,644	26,905	172,315	43,302	46,612	29,874	229,124
May...............	50,927	51,618	22,905	157,831	44,156	51,240	23,204	254,836
June..............	47,673	44,261	55,889	163,951	41,818	43,171	50,198	247,722
July...............	45,794	31,021	70,858	148,255	41,228	32,252	64,009	191,577
August............	48,508	29,195	80,920	161,664	47,184	31,598	85,839	189,253
September........	52,446	28,107	116,930	204,493	52,174	29,450	101,155	166,352
October...........	55,179	25,117	192,571	246,950	50,408	27,248	145,584	189,222
November........	52,668	22,158	98,077	259,110	56,038	23,722	118,882	249,858
December.........	48,645	17,150	54,539	247,250	45,075	14,919	49,388	268,300
Totals........	**592,036**	**371,076**	**820,891**	**2,242,765**	**553,142**	**383,449**	**788,222**	**2,722,825**

Consumption of Animal Products.—The consumption of meats in Canada in 1931 is estimated at 600,987,458 pounds of beef, 866,129,150 pounds of pork and 73,045,572 pounds of mutton and lamb. The per capita consumption of beef on this basis amounts to 57·93 pounds; pork, 83·49 pounds and mutton and lamb, 7·04 pounds, a total of 148·46 pounds of meats per capita per annum. The corresponding data for other animal products are as follows: butter, 320,521,885 pounds and 30·90 pounds; cheese, 36,364,669 pounds and 3·51 pounds; eggs, 311,396,473 dozen and 30·02 dozen, and poultry 112,688,797 pounds and 10·87 pounds. Details are given in Table **17.**

17.—Total and Per Capita[1] Consumption of Meats and Live-Stock Products in Canada, calendar years 1927-31

Item.		1927.	1928.	1929.	1930.	1931.
BEEF.						
Slaughtered in Canada	No.	1,993,454	1,948,790	1,953,399	1,903,890	1,702,395
Estimated dressed weight	lb.	707,676,170	691,820,450	693,456,645	675,880,950	604,350,225
Imports of beef	"	249,897	2,519,091	5,235,412	3,631,176	393,933
	"	707,926,067	694,339,541	698,692,057	679,512,126	604,744,158
Exports of beef	"	56,741,800	47,136,700	31,230,800	8,086,600	3,756,700
Totals, consumption	"	651,184,267	647,202,841	667,461,257	671,425,526	600,987,458
Consumption per capita	"	67·59	65·82	66·57	65·79	57·93
PORK.						
Slaughtered in Canada	No.	5,964,827	5,880,096	5,747,114	5,247,687	6,186,825
Estimated dressed weight	lb.	847,005,434	834,973,632	816,090,188	745,171,554	878,529,150
Imports of pork	"	10,706,633	13,975,142	21,506,270	19,631,665	5,138,400
	"	857,712,067	848,948,774	837,596,458	764,803,219	883,667,550
Exports of pork	"	82,581,700	52,354,100	38,957,400	20,475,400	17,538,400
Totals, consumption	"	775,130,367	796,594,674	798,639,058	744,327,819	866,129,150
Consumption per capita	"	80·45	81·01	79·65	72·93	83·49
MUTTON AND LAMB.						
Slaughtered in Canada	No.	1,450,222	1,528,386	1,625,508	1,661,734	1,802,115
Estimated dressed weight	lb.	58,008,880	61,135,440	65,020,320	66,469,360	72,084,600
Imports of mutton and lamb	"	1,946,037	2,332,571	4,401,258	4,411,771	1,293,672
	"	59,954,917	63,468,011	69,421,578	70,881,131	73,378,272
Exports of mutton and lamb	"	1,889,200	1,127,800	573,300	241,500	332,700
Totals, consumption	"	58,065,717	62,340,211	68,848,278	70,639,631	73,045,572
Consumption per capita	"	6·03	6·34	6·87	6·92	7·04
SUMMARY OF PER CAPITA CONSUMPTION, ALL MEATS.						
Beef	lb.	67·59	65·82	66·57	65·79	57·93
Pork	"	80·45	81·01	79·65	72·93	83·49
Mutton and lamb	"	6·03	6·34	6·87	6·92	7·04
Totals, Consumption of All Meats per capita	"	**151·07**	**153·17**	**153·09**	**145·64**	**148·46**
BUTTER.						
On hand, Jan. 1	lb.	14,548,427	21,609,123	13,785,942	13,689,985	22,171,213
Production—Creamery	"	176,978,947	168,027,039	170,810,230	185,751,061	225,955,246
Home-made	"	95,000,000	90,000,000	88,000,000	96,500,000	104,640,000
Imports	"	11,208,819	16,801,656	35,928,249	38,606,055	2,821,317
	"	297,736,193	296,437,818	308,524,421	334,547,101	355,587,776
Exports	"	2,696,000	1,994,800	1,400,400	1,180,400	10,680,500
	"	295,040,193	294,443,018	307,124,021	333,366,701	344,907,276
On hand, Dec. 31	"	21,609,123	13,785,942	13,689,985	22,171,213	24,385,391
Totals, consumption	"	273,431,070	280,657,076	293,434,036	311,195,488	320,521,885
Consumption per capita	"	28·38	28·54	29·26	30·49	30·90

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[1] For estimates of population upon which per capita figures are calculated, see p. 145.

17.—Total and Per Capita[1] Consumption of Meats and Live-Stock Products in Canada, calendar years 1927-31.—concluded.

Item.	1927.	1928.	1929.	1930.	1931.
CHEESE.					
On hand, Jan. 1 lb.	23,302,293	20,844,826	18,464,126	12,076,024	16,529,556
Production—Factory “	138,056,908	144,584,619	118,746,286	119,105,203	113,956,639
Home-made “	500,000	500,000	490,000	845,900	901,300
Imports “	1,720,797	1,778,761	2,103,724	1,787,776	1,446,147
“	163,579,998	167,708,206	139,804,136	133,814,903	132,833,642
Exports “	110,533,000	114,152,500	92,946,100	80,163,700	84,788,400
“	53,046,998	53,555,706	46,858,036	53,651,203	48,045,242
On hand, Dec. 31 “	20,844,826	18,464,126	12,076,024	16,529,556	11,680,573
Totals, consumption “	32,202,172	35,091,580	34,782,012	37,121,647	36,364,669
Consumption per capita “	3·34	3·57	3·47	3·64	3·51
EGGS.					
Production—Farm doz.	253,277,227	268,868,857	274,317,872	278,255,753	286,882,447
Other “	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Imports “	4,576,671	3,016,702	1,086,664	4,080,560	148,166
“	282,853,898	296,885,559	300,404,536	307,336,313	312,030,613
Exports “	448,206	988,484	1,147,829	188,905	634,140
Totals, consumption “	282,405,692	295,897,075	299,256,707	307,147,408	311,396,473
Consumption per capita “	29·31	30·09	29·85	30·09	30·02
POULTRY.					
Poultry—On farms No.	50,178,485	53,779,539	59,932,963	60,795,000	65,468,000
Elsewhere “	7,082,000	7,082,000	7,082,000	7,082,000	5,647,000
Totals “	57,260,485	60,861,539	67,014,963	67,877,000	71,115,000
Marketings “	16,497,025	17,470,580	19,246,899	19,376,000	19,803,450
Estimated dressed weight lb.	96,782,064	102,409,964	113,105,085	113,607,350	113,729,700
Exports “	4,557,045	4,618,298	4,431,849	1,307,080	1,040,903
Totals, consumption “	92,225,019	97,791,666	108,673,236	112,300,270	112,688,797
Consumption per capita “	9·57	9·95	10·84	11·00	10·87

[1] For estimates of population upon which per capita figures are calculated, see p. 145.

Interprovincial and International Trade in Meats.—The shipments of meats and meat products out of each province are shown in Table **18.** These shipments include both those to other provinces and exports, of which the interprovincial movement is much the greater in every item except cured pork. However, from the provinces of Prince Edward Island, Nova Scotia and British Columbia the shipments for export were the more important movement. Total shipments from Manitoba were larger than from any other province.

Information regarding this traffic may be found in greater detail at pp. 52-61 of the report on "Live Stock and Animal Products Statistics, 1931", obtainable on application to the Dominion Bureau of Statistics.

18.—Provincial Shipments of Meat Products, with Total Interprovincial and Export Shipments, calendar year 1931.

Province.	Beef.	Veal.	Mutton and Lamb.	Pork, Fresh.	Pork, Cured.	Lard.	Lard Compound.	Total.[1]
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
P. E. Island	–	188	116	1,823	76,365	412	–	79,343
Nova Scotia	322,087	14,314	4,872	48,961	19,451	844	–	572,797
New Brunswick	–	–	135,068	–	3,745	–	–	176,501
Quebec	3,968,703	477,520	535,098	2,485,762	3,958,096	1,253,089	856,581	31,772,894
Ontario	16,528,770	200,320	915,898	707,564	8,999,745	7,759,116	538,179	47,151,991
Manitoba	21,465,563	662,591	766,034	7,352,216	4,305,513	3,760,820	1,022,510	74,695,535
Saskatchewan	2,379,118	17,691	38,478	655,182	387,781	48,179	–	5,273,390
Alberta	3,705,838	1,520,125	755,444	3,187,347	5,752,773	3,735,633	110	29,034,334
British Columbia	316,840	20,398	21,594	174,289	18,448	231	435	1,269,064
Canada	**48,686,919**	**2,913,147**	**3,172,602**	**14,613,144**	**23,521,917**	**16,558,324**	**2,417,815**	**190,025,849**
Totals, Interprovincial shipments	45,445,938	2,636,640	2,856,413	13,368,321	8,718,372	12,843,372	1,966,960	157,910,168
Totals, Export shipments	3,240,981	276,507	316,189	1,244,823	14,803,545	3,714,952	450,855	32,115,681

[1] Includes miscellaneous products not specified.

Export and Import Trade in Live Stock and Live-Stock Products.—The exports of live stock and live-stock products from the Dominion to the United Kingdom, the United States and all countries, are shown for the four fiscal years ended Mar. 31, 1929-32, in Table **12** of the chapter on External Trade, at pp. 528-534, and imports in Table **13** at pp. 552-556. Exports and imports are also available by calendar years 1927-31, and may be found on pp. 83, 85 and 86 of the report on "Live Stock and Animal Products Statistics, 1931". At pp. 302-320 of the report on "Trade of Canada (Imports for Consumption and Exports), Calendar Year 1931" figures are given of exports of "Animals and Animal Products" for 1930 and 1931 and imports of this class for the same calendar years will be found at pp. 93-113 of the same report.

Section 4.—Cold Storage.

Cold Storage Warehouses.—Under the Cold Storage Act, 1907 (6-7 Edw. VII, c. 6), now consolidated as c. 25, R.S.C., 1927, subsidies have been granted by the Dominion Government towards the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. Table **19** shows for 1932 the number of cold storage warehouses in Canada, with the refrigerated space. The latter amounts to 51,724,910 cubic feet, of which 9,083,225 cubic feet apply to 52 warehouses subsidized under the Act, while 42,641,685 cubic feet apply to 495 non-subsidized warehouses.

19.—Cold Storage Warehouses in Canada, by Provinces, 1932.

NOTE.—The figures in this table are supplied through the courtesy of J. F. Singleton, Dairy and Cold Storage Commissioner, Dominion Department of Agriculture.

Province.	Subsidized Public Warehouses.				Totals.	
	Number.	Refrigerated Space.	Cost.	Total Subsidy.	Number.	Refrigerated Space.
		cub. ft.	$	$		cub. ft.
Prince Edward Island	2	212,358	66,970	20,091	7	276,662
Nova Scotia	6	1,957,197	2,596,965	779,090	22	2,617,906
New Brunswick	2	781,161	192,577	57,773	24	1,083,216
Quebec	7	317,474	315,787	127,136	90	11,500,186
Ontario	23	3,067,236	1,361,384	393,415	197	16,458,191
Manitoba	1	27,500	32,000	9,600	50	5,512,374
Saskatchewan	4	437,596	268,707	80,612	49	2,020,417
Alberta	2	351,059	242,000	72,600	30	4,263,418
British Columbia	5	1,931,644	1,691,471	507,441	77	7,947,640
Yukon	–	–	–	–	1	44,900
Totals	**52**	**9,083,225**	**6,767,861**	**2,047,758**	**547**	**51,724,910**

Cold Storage Stocks.—Statistics of the stocks of food in the cold storage warehouses of Canada are collected and published monthly by the Agricultural Branch of the Dominion Bureau of Statistics. A summary of the cold storage data is included in the report on "Live Stock and Animal Products Statistics", published annually. In Table **20** are included statistics, by months for 1931 and 1932, of the stocks of food in cold storage and in process of cure for various important commodities.

20.—Stocks of Food on Hand in Cold Storage and in Process of Cure, by Months and Commodities, 1931 and 1932.

NOTE.—Figures in this table are of stocks on hand on the first of each month as published by the Agricultural Branch, Dominion Bureau of Statistics.

Month.	Eggs.	Butter.	Cheese.	Beef.		
				Fresh.	Cured.	In Process of Cure.
1931.						
January	7,544,226	22,171,213	16,529,556	10,828,595	228,054	168,525
February	5,945,223	17,337,952	14,643,787	10,531,854	197,883	154,162
March	3,719,335	11,588,652	13,206,345	9,031,127	315,867	146,462
April	4,969,360	6,785,810	11,792,927	8,440,235	264,991	145,674
May	9,880,620	5,264,166	10,379,132	7,215,446	223,565	102,872
June	16,966,237	8,701,986	10,651,736	8,230,722	177,373	168,622
July	18,632,751	20,933,554	19,085,500	7,452,954	157,496	186,548
August	19,082,451	33,214,532	25,283,830	6,618,138	170,406	184,728
September	19,618,350	40,400,552	29,830,929	7,356,246	191,617	174,505
October	17,997,366	41,078,798	21,082,677	7,363,262	146,838	132,465
November	13,408,585	37,691,418	14,296,818	7,788,296	90,710	104,688
December	8,991,750	31,672,938	12,640,692	9,472,736	120,446	113,325
1932.						
January	6,192,318	24,385,391	11,680,573	9,713,243	184,704	169,759
February	4,621,184	18,815,010	10,207,985	10,226,338	411,091	95,592
March	2,699,982	10,376,921	7,936,046	9,051,828	313,538	234,518
April	2,868,539	4,539,621	7,663,337	8,523,964	354,245	209,956
May	6,254,829	2,848,363	5,934,132	7,715,292	232,758	198,198
June	12,378,565	4,438,949	7,535,841	6,972,203	457,989	175,313
July	15,144,842	16,794,077	16,034,342	5,962,014	327,171	162,130
August	15,469,057	25,050,703	19,355,016	6,761,723	301,838	224,142
September	16,239,783	30,221,357	22,119,314	7,387,159	287,305	177,150
October	15,493,296	32,577,227	21,764,008	7,801,636	239,320	71,701
November	11,752,461	31,316,479	20,426,725	8,295,693	109,724	87,516
December	7,052,612	26,470,181	13,228,723	9,492,392	79,133	93,312

Month.	Veal.	Pork.			Lard.	Mutton and Lamb.	Poultry.
		Fresh.	Cured.	In Process of Cure.			
1931.							
January	2,155,184	8,226,290	6,648,557	4,712,358	2,093,899	6,989,216	7,550,516
February	1,396,966	9,268,776	6,537,712	5,370,180	2,848,700	5,318,614	6,893,101
March	1,061,659	11,225,403	7,678,917	5,990,746	3,247,105	4,480,832	6,373,960
April	890,715	10,296,690	7,177,683	5,477,574	3,167,894	3,152,949	4,930,105
May	1,321,438	11,527,377	7,475,111	5,956,580	3,967,669	2,048,858	3,283,964
June	1,787,332	10,792,877	7,279,917	6,075,630	4,391,610	1,082,384	2,420,156
July	1,729,872	9,365,404	7,446,489	5,804,211	4,085,741	852,626	1,811,327
August	1,614,471	8,583,367	6,073,152	5,790,359	4,194,677	770,636	1,740,112
September	1,573,865	7,711,272	7,494,457	5,244,618	3,209,873	792,394	1,639,151
October	1,585,533	6,705,715	6,536,751	5,829,993	2,627,626	2,024,331	1,996,979
November	1,696,171	7,443,442	7,148,052	6,632,946	1,381,626	6,790,539	3,214,611
December	1,602,202	11,452,721	8,355,677	6,213,119	1,947,020	8,218,471	6,929,255
1932.							
January	1,338,357	17,599,289	7,152,897	5,584,490	2,483,727	8,709,869	13,807,721
February	943,120	20,481,724	8,176,840	7,387,380	3,232,928	7,401,712	13,216,445
March	693,892	23,581,364	8,431,616	8,423,117	2,737,788	6,230,116	11,667,764
April	1,045,504	25,738,991	6,361,241	8,214,384	2,882,337	5,184,420	9,475,739
May	930,141	25,294,850	8,396,503	7,784,429	3,285,971	4,106,655	7,701,350
June	1,155,909	24,683,666	7,039,757	10,579,634	3,743,260	2,311,866	6,371,188
July	1,200,457	21,971,697	6,848,539	9,383,086	4,337,637	1,760,054	5,375,401
August	1,215,242	16,556,843	6,815,878	11,180,032	3,565,979	1,277,406	4,413,704
September	1,215,811	13,373,165	6,792,582	9,787,967	2,707,176	1,238,776	3,374,001
October	1,359,850	8,929,254	5,420,179	8,052,986	1,183,078	1,468,848	2,403,898
November	1,312,481	7,809,454	4,708,158	9,624,266	1,913,460	3.452,838	2,056,851
December	1,253,462	10,478,170	5,321,133	7,767,209	1,538,627	5,295,015	3,549,189

Section 5.—Bounties, Patents, Copyrights and Trade Marks.[1]

Bounties.—In cases where it is considered advisable for the Government to encourage the production of a particular commodity, bounties paid by the Government are recognized substitutes for protective duties. In the past they have been made use of by Canada to a considerable degree, but the only bounties which involved payments in 1931-32 were those on hemp and on copper bars and rods. The amounts of these bounties paid in recent periods have been as follows:—

Copper Bounties Paid in—		
Year ended June 30, 1925	1,164,140 lb. at 1¼c.	$ 14,551·75
Year ended June 30, 1926	10,808,627 lb. at 1c.	108,086·27
Year ended June 30, 1927	16,387,302 lb. at ¾c.	122,904·39
Year ended June 30, 1928	12,514,446 lb. at ½c.	62,572·24
Year ended June 30, 1929	6,837,124 lb. at ½c.	34,185·63
Year ended June 30, 1930	10,857,149 lb. at ½c.	54,285·75
Year ended June 30, 1931	13,596,918 lb. at ½c.	67,984·87
Year ended June 30, 1932	27,563,296 lb. at ½c.	137,816·44
6 months ended Dec. 31, 1932	Nil	Nil
Totals	99,729,002 lb.	$ 602,387·34
Hemp Bounties Paid in—		
Calendar year 1926	19,048 lb. at 1½c.	$ 285·72
Calendar year 1927	203,087 lb. at 1⅜c.	2,792·43
Calendar year 1928	826,821 lb. at 1¼c.	10,335·25
Calendar year 1929	666,113 lb. at 1⅛c.	7,493·77
Calendar year 1930	348,345 lb. at 1c.	3,483·45
Calendar year 1931	250,280 lb. at ⅞c.	2,189·95
Calendar year 1932	35,499 lb. at ¾c.	266·25
Totals	2,349,193 lb.	$ 26,846·82

Bounties have been paid at various times in the past on iron and steel, on lead, on crude petroleum, on manila fibre, on zinc and on linen yarns, but the bounties on iron and steel ceased in 1911, on lead in 1918, on zinc in 1921, on linen yarns in 1923 and on crude petroleum in 1927. The total amounts paid in bounties on these commodities between 1896 and the date of expiration were: iron and steel and manufactures of (1896-1912), $16,785,827 (Canada Year Book 1915, p. 460); lead (1899-1918), $1,979,216 for 1,187,169,878 lb.; zinc, $400,000; linen yarns, $17,523; manila fibre (1903-1913), $367,962; crude petroleum (1905-27), $3,457,173 on 233,135,217 gallons. (For quantities of crude petroleum and bounties paid in each year, see table on p. 635 of the 1927-28 Year Book.) Total payments for expired bounties between 1896 and 1932 aggregated $23,007,701, which, with the $602,387 paid on copper bars and rods and the $26,847 for hemp, make a total of $23,636,935. The bounty on copper bars and rods was extended to June 30, 1931, at the rate of ½c. per lb. by c. 15 of the Statutes of 1928. The Year Book of 1915, pp. 459-461, gave a description of the bounties that had been payable since 1883, as well as tables showing, for each commodity, the quantities on which bounties were annually paid and the amounts of such bounties for the years 1896 to 1915 inclusive. For details of the bounties on zinc, see p. 635 of the 1927-28 Year Book.

A bounty on Canadian coal used in the manufacture of iron or steel was authorized by c. 6 of the Statutes of 1930. By that Statute, manufacturers of iron and steel may be paid 49½c. per ton of bituminous coal mined in Canada, converted into coke in Canada and used by such manufacturers in smelting iron ore or manufacturing steel ingots or steel castings in Canada. This bounty was established on a recommendation of the Royal Commission on Maritime Claims relating to the manufacture of iron or steel by the use of Canadian coal. Payments thereunder have been as follows:—

Fiscal year ended Mar. 31, 1931	273,148 tons at 49½c.	$ 135,209·23
Fiscal year ended Mar. 31, 1932	126,356 tons at 49½c.	62,545·68
Totals	399,504 tons	$ 197,754·91

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[1] Information regarding bounties has been revised by H. B. Borbridge, Chief Accountant, Department of Trade and Commerce, and information regarding patents, copyrights and trade marks by T. L. Richard, Commissioner of Patents, Ottawa.

Patents.—Letters patent, which in England have been in the gift of the Crown from the time of the Statute of Monopolies and earlier, are a purely statutory grant in Canada and have always been so. The earliest Act was one of Lower Canada, passed in 1824, wherein provision was made for the granting of patent rights to inventors who were British subjects and inhabitants of the province. Upper Canada passed its Act in 1826, and Nova Scotia and New Brunswick passed theirs at later dates. In 1849, after the Union, a consolidating Act was passed applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial Acts and has formed the basis of all succeeding Acts.

The first Canadian patent was issued under the Lower Canada Act of 1824 to Noah Cushing of Quebec; 165 patents were granted under the Acts of Upper and Lower Canada, and, under the consolidating and later Acts of the provinces 3,160 patents were granted.

Letters patent are now issued subject to the provisions of Chapter 150, R.S.C., 1927, and application for protection relating to the same should be addressed to The Commissioner of Patents, Ottawa, Canada.

Invention means any new and useful art, process, machine, manufacture or composition of matter or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

The growth of Canadian inventions is shown by the fact that an average of 1,422 patents was issued annually to Canadians during the decade 1920-29. The business of the Office has gradually continued to expand and the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended Mar. 31, 1913, when 8,681 applications were received and the total fees amounted to $218,125. In the fiscal year ended Mar. 31, 1932, there were 11,940 applications, with fees amounting to $444,110, as compared with 13,229 and $472,636 respectively in 1931. For the fiscal year ended Mar. 31, 1932, the number of patents granted was 11,124 as compared with 11,262 in 1931, a decrease of 138. Of the patents of 1932, 7,465 or 67 p.c. were issued to United States inventors, 1,084 to Canadians and 921 to residents of Great Britain and Ireland, while Germany with 719, France with 247 and Sweden with 101, came next in the number of inventors to whom patents were issued. Table **21** shows the distribution of the Canadian patentees for the years 1921 to 1932 by province of residence.

21.—Number of Canadian Patentees, by Province of Residence, for the fiscal years ended Mar. 31, 1921-32.

Province.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No
Prince Edward Island	2	4	9	7	2	2	5	3	1	3	3	2
Nova Scotia	29	22	35	41	26	30	19	24	16	17	14	18
New Brunswick	33	14	21	14	24	24	21	12	17	16	18	6
Quebec	331	276	430	312	302	272	320	298	293	282	265	272
Ontario	708	508	845	673	559	561	499	537	538	500	491	504
Manitoba	118	75	158	83	66	68	89	71	61	72	74	47
Saskatchewan	119	101	166	106	101	90	68	100	93	81	66	55
Alberta	127	96	155	123	95	95	82	88	98	71	76	63
British Columbia	177	103	202	174	127	150	129	152	148	126	101	117
Yukon and N.W.T.	1	-	-	-	-	-	-	-	-	1	1	-
Totals	**1,645**	**1,199**	**2,021**	**1,533**	**1,302**	**1,292**	**1,232**	**1,285**	**1,265**	**1,169**	**1,109**	**1,084**

It will be seen from the table that the more populous provinces of Ontario and Quebec obtained the largest absolute number of patents, but a calculation of the number of patentees in relation to population shows that, for the fiscal year 1932, the greatest relative inventiveness was displayed in British Columbia, with one patent granted for every 6,020 persons, while Ontario had one for every 6,860 persons and Quebec one for every 10,680 persons.

As will be seen from Table 22 the increased activity in invention which was manifested during the fiscal year ended 1929 was still more marked in the fiscal year ended 1930; there has been a decline in each of the two years since then. Apparently the industrial depression has extended its baneful influence over this field also. In the latest year applications for patents were distributed pretty well over the whole field of invention without showing outstanding trends along any particular lines.

22.—Statistics of Patents Applied for, Granted, etc., fiscal years ended Mar. 31, 1927-32.

Item.	1927.	1928.	1929.	1930.	1931.	1932.
Applications for patents............No.	11,406	11,845	13,062	14,288	13,299	11,940
Patents granted...................... "	10,018	9,518	9,335	10,401	11,262	11,124
Certificates for renewal fees......... "	2,204	319	404	149	52	40
Caveats granted..................... "	397	370	334	363	352	383
Assignments......................... "	6,409	7,011	8,227	9,505	9,190	9,001
Fees received, net.................... $	438,690	412,146	434,498	478,327	472,636	444,110

Copyrights and Trade Marks.—Registration of copyright is governed by c. 32, R.S.C., 1927, and an application for protection relating to same should be addressed to The Commissioner of Patents, Ottawa, Canada.

The Copyright Act of 1921 (amended in 1923 and consolidated in c. 32, R.S.C., 1927) sets out in section 4 the qualifications for a copyright and in section 5, its duration: "Copyrights shall subsist in Canada . . . . in every original literary, dramatic, musical and artistic work, if the author was, at the date of the making of the work, a British subject, a citizen or subject of a foreign country which has adhered to the (Berne) Convention and the additional Protocol . . . . or resident within His Majesty's Dominions. The term for which the copyright shall subsist shall, except as otherwise expressly provided by this Act, be the life of the author and a period of fifty years after his death".

Copyright protection is extended to records, perforated rolls, cinematographic films and other contrivances by means of which a work may be mechanically performed. The intention of the Act is to enable Canadian authors to obtain full copyright protection throughout all parts of His Majesty's Dominions, foreign countries of the Copyright Union, and the United States of America, as well as in Canada.

The Trade Marks Act (c. 201, R.S.C., 1927) was amended by c. 10 of the Statutes of 1928, bringing the Act into agreement with the terms of the Convention for the Protection of Industrial Property, as amended at The Hague in 1925 with regard to refusal to register certain trade marks. The renewal of expired trade-mark registration was also provided for, while it was also enacted that in certain cases interested parties might apply to the Exchequer Court of Canada for the cancellation of a trade mark at any time within three years from its registration.

23.—Statistics of Copyrights, Trade Marks, etc., fiscal years ended Mar. 31, 1927-32.

Item.		1927.	1928.	1929.	1930.	1931.	1932.
Copyrights registered	No.	3,167	2,889	3,043	4,072	3,008	2,812
Certificates of copyright	"	2,935	2,649	2,781	3,849	3,008	2,812
Trade marks registered	"	1,828	2,210	2,316	3,143	2,848	2,186
Industrial designs registered	"	376	411	337	408	495	371
Timber marks registered	"	18	8	12	12	24	6
Assignments registered	"	1,641	2,055	2,055	2,282	1,703	1,661
Fees received, net	$	79,239	83,791	95,741	96,591	87,009	81,138

The following table gives the receipts, expenditures and surplus on account of patents, copyrights and trade marks for the fiscal years 1921-32.

24.—Receipts, Expenditures and Surplus on Account of Patents, Copyrights and Trade Marks, fiscal years ended Mar. 31, 1921-32.

Fiscal Year.	Receipts.	Expenditures.				Surplus.
		Civil Government.	Patent Record.	Contingencies.	Total.	
	$	$	$	$	$	$
1921	407,881	124,096	31,521	28,668	184,285	223,601
1922	454,886	150,650	22,594	28,950	202,193	252,693
1923	484,479	155,038	36,397	33,853	225,288	259,191
1924	459,780	166,593	32,052	28,446	227,091	232,689
1925	550,531	144,661	30,206	20,941	195,808	354,723
1926	535,139	149,839	34,973	24,155	208,967	326,172
1927	517,930	152,631	34,613	27,766	215,010	302,919
1928	495,937	157,084	34,006	24,653	215,744	280,193
1929	530,239	162,005	29,749	26,870	218,624	311,615
1930	574,918	169,339	34,946	31,622	235,907	339,011
1931	559,646	174,458	35,000	32,000	241,458	318,188
1932	525,248	173,370	35,000	37,893	246,263	278,985

Section 6.—Weights and Measures, Electricity and Gas Inspection.[1]

Weights and Measures.—The object of weights and measures administration is to maintain uniformity and accuracy in the use of the legal standards of the country in industry and commerce, to protect the public from short weight and measure and the trading community from unfair competition arising from such practices.

Prior to Confederation, the administration of weights and measures was in the hands of each Provincial Government but passed to the Dominion Government in 1867, under section 91 of the British North America Act. Steps were then taken to simplify the standards in use and to establish uniformity throughout the Dominion.

What might be termed the principal Weights and Measures Act of Canada was passed in the session of 1872-73; its provisions closely followed English weights and measures law, but the system of weights and measures was greatly simplified. This Act established as the primary legal standards for Canada the imperial pound, gallon and yard, but in place of the system of stones, quarters, hundredweights (112 lb.) and the long ton (2,240 lb.) it provided a decimal series of weights, 1, 2, 3, 5, 10, 20, 30, 50, 100 lb., and the short ton of 2,000 lb. The only exceptions to this were the continued use of the old French land measure, the arpent, in Quebec, and the use of the long ton (2,240 lb.) in the coal-mining industry, but not for the retail sale of coal. The troy ounce of 480 grains and its decimal submultiples are the legal weights for the weighing of gold and precious metals. The metric system is legal for all transactions.

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[1] The material on Weights and Measures has been revised by E. O. Way, Director of Weights and Measures, Department of Trade and Commerce and that on Electricity and Gas Inspection by J. L. Stiver, Director, Electrical and Gas Standards Laboratories, Department of Trade and Commerce.

Many changes, deletions and additions have been made to the Act of 1873 by later legislation, but its principles remain unchanged. The latest legislation is the Weights and Measures Act (c. 212, R.S.C., 1927).

The Weights and Measures Service was first administered by the Department of Inland Revenue, and offices were opened in all the principal centres of Canada and equipped with standards and inspection equipment. In 1918 the Service was transferred to the Department of Trade and Commerce. For purposes of administration, the Dominion is divided into 18 districts, each in charge of a district inspector. The chief rules of administration are as follows:—

(a) Every new type of weighing and measuring device must be submitted to the Department at Ottawa for approval before being placed on the market.

(b) Every new machine must be inspected and stamped by an inspector before being sold or taken into use.

(c) Imported machines are held by the customs until release is approved by the nearest inspector.

(d) All inspections take place on the traders' premises, except where devices are brought to the inspection offices.

(e) Fees are charged for inspection and stamping, the schedule being defined by Order in Council, and all moneys so collected are paid into the Consolidated Revene Fund of Canada.

The following table is a summary of the articles and machines inspected in the fiscal year 1931-32.

25.—Inspections by the Weights and Measures Service, fiscal year ended Mar. 31, 1932.

Article.	Submitted.	Verified.	Rejected.	Percentage of Rejections.
Weights (Dominion)	88,689	84,058	4,631	5·2
Weights (metric)	794	782	12	1·5
Measures of capacity	74,984	74,639	345	0·5
Measures of length	9,049	8,983	66	0·7
Milk cans	62,491	62,432	59	0·1
Ice cream containers	34,250	34,250	–	–
Measuring devices	54,558	46,550	8,008	14·6
Tank wagons	438	414	24	5·5
Babcock glassware	36,451	36,393	58	0·1
Weighing machines	182,476	162,073	20,403	11·1
Weighing machines (metric)	567	545	22	3·8
Totals	**544,747**	**511,119**	**33,628**	–

The total revenue collected by the Service during the year amounted to $406,614 and the expenses, including salaries, totalled $330,940.

Electricity and Gas Inspection.—The Electricity and Gas Inspection Branch of the Department of Trade and Commerce administers three Acts: the Electricity Inspection Act (c. 22, 1928), the Gas Inspection Act (c. 82, R.S.C., 1927), and the Electricity and Fluid Exportation Act (c. 54, R.S.C., 1927).

The latest report of the Branch shows 448,081 electricity and gas meters tested in the fiscal year ended Mar. 31, 1932, as compared with 495,819 in the preceding year. The total revenue derived from electricity and gas inspection was $300,061, as compared with an expenditure of $226,912. The Branch also collected $183,537 as export duty and licence fees under the provisions of the Electricity and Fluid Exportation Act; the cost of collecting this revenue was only $481.

Other related statistics collected in the administration of the last-named Act will be found on p. 389, in the Water Power chapter of the Year Book. Here, however, are given statistics, also collected by the Branch in the process of administration, showing a phenomenal increase in the number of consumers of electricity in the past 17 years, from 505,597 to 1,704,197 (Table **26**); the lesser increase in the gas meters in use from 267,454 in 1916 to 668,767 in 1932 (Table **27**); and the number of cubic feet of gas sold in Canada from 1920 to 1932, classified as carburetted water gas, coal gas, coke oven gas, natural gas, acetylene gas and butane (Table **28**).

26.—Number of Electricity Meters in Use, fiscal years ended Mar. 31, 1915-32.

Fiscal Year.	Number.	Fiscal Year.	Number.
1915	505,597	1924	1,094,639
1916	517,629	1925	1,165,664
1917	594,737	1926	1,240,752
1918	661,403	1927	1,314,428
1919	717,776	1928	1,412,521
1920	743,468	1929	1,499,872
1921	860,379	1930	1,582,505
1922	945,599	1931	1,653,922
1923	1,046,831	1932	1,704,197

27.—Number of Gas Meters in Use, fiscal years ended Mar. 31, 1916-32.

Fiscal Year.	Manufactured Gas.	Natural Gas.	Acetylene Gas.	Butane.	Total.
	No.	No.	No.	No.	No.
1916	199,514	67,940	–	–	267,454
1917	314,915	55,697	–	–	370,612
1918	325,244	88,795	–	–	414,039
1919	336,388	91,056	–	–	427,444
1920	350,777	85,004	513	–	436,294
1921	361,479	98,494	577	–	460,550
1922	366,840	101,785	430	–	469,055
1923	379,459	102,007	438	–	481,904
1924	390,548	105,804	425	–	496,777
1925	405,471	106,861	404	–	512,736
1926	443,067	85,752	425	–	529,244
1927	462,496	90,302	358	–	553,156
1928	482,076	98,915	357	–	581,348
1929	504,500	107,504	116	–	612,120
1930	520,788	118,390	117	–	639,295
1931	530,909	125,550	67	205	656,731
1932	540,277	128,194	66	230	668,767

28.—Number of Cubic Feet of Gas Sold in Canada, fiscal years ended Mar. 31, 1920-32.

Fiscal Year.	Carburetted Water Gas.	Coal Gas.	Coke Oven Gas.	Natural Gas.	Acetylene Gas.	Butane.	Total.
	cu. ft.	cu. ft.	cu. ft.	cu. ft.	cu. ft.	cu. ft.	cu. ft.
1920	4,487,511,639	6,787,370,045	–	17,117,100,328	1,669,650	–	28,393,651,662
1921	5,331,442,415	7,096,221,745	–	–	–	–	–
1922	4,668,391,857	8,433,860,903	–	11,289,592,401	1,005,000	–	24,392,850,161
1923	6,632,961,609	7,637,113,997	132,000	12,238,836,883	1,165,395	–	26,510,207,884
1924	5,214,843,290	8,042,882,100	3,188,600	14,866,618,700	1,194,059	–	28,128,726,149
1925	5,254,802,700	7,824,192,540	91,628,300	10,525,604,563	1,266,109	–	23,697,494,212
1926	4,835,613,326	8,149,894,391	1,449,794,500	13,004,469,776	1,210,894	–	27,440,982,887
1927	5,804,503,468	8,405,556,329	1,019,978,000	17,863,365,700	1,247,108	–	33,124,650,905
1928	6,883,634,603	7,488,964,653	1,680,237,100	20,365,048,768	1,325,510	–	36,419,210,634
1929	4,550,828,600	6,273,274,533	6,097,920,366	25,491,446,000	647,168	–	42,414,116,667
1930	4,456,996,628	5,802,653,503	8,153,473,000	31,880,844,600	847,230	–	50,294,814,961
1931	4,214,554,234	6,249,189,852	7,792,046,911	28,534,604,069	875,080	9,137,000	46,800,407,146
1932	4,267,073,950	6,385,621,906	7,235,463,396	27,244,803,100	789,730	6,600,180	45,140,352,262

Section 7.—Census of Merchandising and Service Establishments.[1]

A comprehensive survey of the business carried on by trading and service establishments was undertaken for the first time in connection with the seventh decennial census in 1931. A partial census of trading establishments only had been made in 1924, but the results of this initial survey, while indicative of the extent of domestic trade, suffered from the incompleteness of the canvass made at that time. The Census of Merchandising and Service Establishments, 1931, covered not only retail and wholesale merchandising establishments but also service establishments, including hotels. In addition, information was collected to show the manner in which goods manufactured in Canada are distributed. Statistics compiled from the census returns have been published in several series of mimeographed reports, but the figures given in those bulletins and used in the tables of this Section are preliminary and subject to revision.

In all these tables the number of employees includes those working both full time and part time and also proprietors and firm members receiving fixed salaries. Therefore, the amount of salaries and wages represents the entire wages bill. The figures do not provide any basis for computing average wages, average sales per employee, or rate of stock turnover. In later reports the data will be presented in greater detail and more accurate computations may then be made.

Subsection 1.—Wholesale and Other Bulk or Non-Retail Merchandising.

The wholesale field, as defined for the purposes of the census, embraces many types of establishments other than those generally classed as wholesale houses. Thus, under this heading of bulk merchandising, will be found not only the conventional types of wholesalers selling to retailers but also other establishments engaged in handling or arranging for the sale of commodities, or the transfer of rights, etc., on a non-retail basis, whether for domestic or foreign trade. In the tables presented below will be found the salient features of the operations of such classes as importers, exporters, commission merchants, brokers, etc., as well as the business of wholesale merchants. It should also be noted that the business of such establishments as bulk tank stations and manufacturers' sales branches is not included with that of the wholesale merchants, although a considerable part of the trade of these establishments is done with retailers.

There were 12,914 wholesale and other bulk or non-retail merchandising establishments in Canada in 1930. The total net sales for these establishments were $3,133,733,700. This trade was concentrated, to a marked degree, in certain well-defined trading areas. Of the above total sales, 31·20 p.c. were made by establishments in Ontario, 27·13 p.c. by those in Quebec, and 19·42 p.c. by those in Manitoba. In fact, approximately two-thirds of the entire trade was carried on by establishments located in the four cities of Montreal, Toronto, Winnipeg and Vancouver.

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[1] Prepared by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX, Section 1, under "Internal Trade".

As already suggested, the bulk and non-retail merchandising field embraces many types of establishments, so that the amount of trade attributed to this field cannot be compared directly with the amount of retail business. A certain amount of business is transacted between bulk merchandising establishments, especially with respect to agents, brokers, and commission houses, and sales are made, by or through many wholesale establishments, to manufacturers or other industrial consumers. In addition, some of these establishments are engaged in trading with foreign countries. Thus allowances must be made for the duplication in bulk and non-retail merchandising, for the sales of raw materials, for direct sales to consumers and for export business. In order to give a rough indication of the amount of pre-retail business, bulk merchandising establishments have been divided into two classes, "wholesalers proper" and "other bulk or non-retail distributors". The first class consists of those establishments which are carrying on the more conventional form of wholesale trading. The sales made by 5,008 wholesalers proper in 1930 were $1,092,933,700, of which $900,582,900 were made by wholesale merchants. Other types of bulk or non-retail distributors, consisting of 7,906 establishments, made sales or arranged orders to the value of $2,040,800,000. It will be noted from Table **29** that, while the province of Manitoba had 19·42 p.c. of the total sales of all bulk merchandising, the business of wholesalers proper in Manitoba was only 7·16 p.c. of the total for Canada. This marked difference is due to the influence of the grain trade, which is such an important factor in the commerce of that province. The trade in grain is carried on mainly by establishments classified under "other bulk distributors" and appears, therefore, only in the all-inclusive figures of Table **29.**

29.—Bulk Merchandising (Wholesale and Other Non-Retail) in Canada, by Provinces, 1930.

Note.—Figures are preliminary and subject to revision.

Province.	All Establishments.						Wholesalers Proper.		
	Establishments.	Employees.	Salaries and Wages.	Net Sales.	Proportion of Total Net Sales.	Stocks on Hand, End of Year (at Cost).	Establishments.	Net Sales.	Proportion of Total Net Sales.
	No.	No.	$	$	p.c.	$	No.	$	p.c.
P.E.I.	63	400	425,600	12,564,100	0·40	1,096,400	27	8,091,700	0·74
N.S.	432	2,908	3,735,900	68,929,500	2·20	7,007,100	213	38,486,700	3·52
N.B.	374	2,832	3,820,200	70,261,100	2·24	8,004,700	164	32,140,500	2·94
Que.	2,863	27,528	43,129,700	850,318,800	27·13	81,335,300	1,462	354,079,700	32·40
Ont.	3,881	32,358	51,670,000	977,503,500	31·20	90,701,900	1,945	379,099,300	34·69
Man.	1,275	9,835	15,863,000	608,528,100	19·42	65,214,900	340	78,211,200	7·16
Sask.	1,610	5,680	8,535,400	126,708,400	4·04	23,778,100	173	46,035,000	4·21
Alta	1,312	5,906	9,777,700	173,052,400	5·52	21,598,200	240	57,321,000	5·24
B.C.	1,104	8,346	12,485,900	245,867,800	7·85	26,835,900	444	99,468,600	9·10
Canada	**12,914**	**95,823**	**149,443,400**	**3,133,733,700**	**100·00**	**325,572,500**	**5,008**	**1,092,933,700**	**100·00**

30.—Bulk Merchandising (Wholesale and Other Non-Retail) in Canada, by Type of Distributor, 1930.

NOTE.—Figures are preliminary and subject to revision.

Type of Distributor.	Establishments.	Employees.	Salaries and Wages.	Net Sales.	Proportion of Total Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	p.c.	$
WHOLESALERS PROPER.						
Wholesale merchants	4,096	42,936	62,107,300	900,582,900	28·73	125,949,700
Import merchants	663	6,134	10,302,700	119,421,000	3·82	27,192,000
Export merchants	99	914	1,170,200	53,230,000	1·70	2,365,000
Supply and machinery distributors	95	933	1,559,200	14,620,900	0·47	2,991,000
Drop shippers	12	41	63,500	2,624,600	0·08	149,700
Wagon distributors	30	53	62,000	1,118,700	0·03	35,100
Cash and carry wholesalers	9	79	147,800	1,256,700	0·04	70,500
Mail order houses	4	8	13,600	78,900	–	31,100
Totals, Wholesalers Proper	5,008	51,098	75,426,300	1,092,933,700	34·87	158,784,100
OTHER BULK OR NON-RETAIL DISTRIBUTORS.						
Auction houses	8	57	134,200	4,675,400	0·15	1,100
Brokers	140	436	833,300	74,249,300	2·36	538,200
Cash grain brokers	19	16	32,500	25,443,600	0·81	–
Bulk tank stations	3,539	8,107	12,214,400	178,317,100	5·69	23,287,500
Chain-store warehouses	67	2,818	3,793,000	109,627,100	3·49	8,132,600
City buyers of farm products	132	455	395,900	9,504,300	0·30	448,400
Co-operative buying associations	6	164	209,300	5,204,000	0·16	340,600
Co-operative marketing associations	137	1,129	1,233,000	200,047,600	6·38	39,571,200
Co-operative sales agencies	9	122	208,100	15,685,400	0·50	64,300
Commission merchants	236	901	1,700,700	103,998,000	3·32	748,100
Country buyers	336	225	178,300	6,926,000	0·22	132,500
District sales offices	14	296	408,600	9,392,000	0·30	1,028,300
Elevators	84	1,116	2,022,100	109,704,400	3·50	748,000
Export brokers	18	57	114,600	8,304,800	0·26	293,400
Export commission houses	6	27	85,200	10,403,100	0·33	–
Export selling agents	4	11	6,800	1,189,000	0·03	–
Exporters (on own account)	22	846	1,493,700	130,459,000	4·29	3,974,900
Film exchanges	52	811	1,098,200	8,600,800	0·27	204,100
General sales offices	125	4,306	8,754,800	189,768,800	6·05	21,449,800
Import commission merchants	23	96	167,400	4,378,900	0·13	203,400
Import manufacturers' agents	190	835	1,519,100	40,424,900	1·28	2,050,000
Import selling agents	84	287	503,000	11,779,700	0·37	530,200
Manufacturers' agents	832	2,669	4,708,800	161,636,900	5·15	2,711,500
Manufacturers' sales branches	1,505	16,830	29,002,300	532,296,200	16·98	57,649,200
Packers and shippers	14	472	230,400	1,633,800	0·05	72,400
Purchasing agents	11	73	102,000	1,647,300	0·05	90,200
Selling agents	182	920	1,732,500	57,595,000	1·83	743,800
Warehouses	108	634	1,109,000	22,589,100	0·72	1,771,200
All other	3	9	25,900	5,318,500	0·16	3,500
Totals, Other Bulk or Non-Retail Distributors	7,906	44,725	74,017,100	2,040,800,000	65·13	166,788,400
Grand Totals	**12,914**	**95,823**	**149,443,400**	**3,133,733,700**	**100·00**	**325,572,500**

Subsection 2.—Retail Merchandising and Services.

The line of demarcation between these two classes of retailing cannot be sharply drawn. In many service establishments, especially those of the repair group, the retail sale of commodities is also carried on. Conversely, a great many stores, chiefly engaged in retail merchandising, have service departments for making alterations and repairs, for hair dressing and other personal service, for cleaning, decorating, fur storage, etc. Establishments where both these functions are carried on have been classified according to the function which provided the largest receipts. For the sake of convenience, th fields are summarized by provinces and business groups in Table **31**.

31.—Summary Statistics of Retail Merchandising and Service Estab

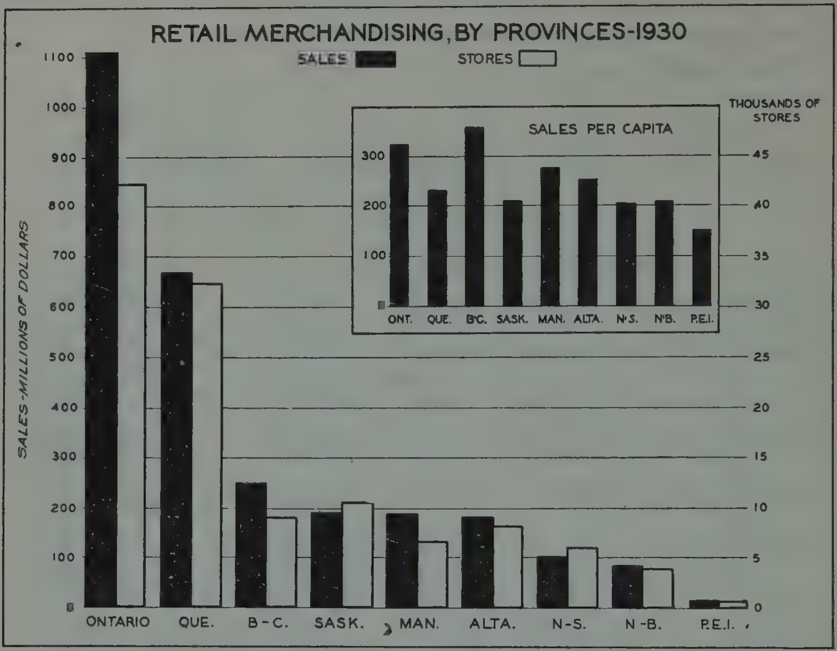
NOTE.—Figures are preliminary

No.	Business Group.		Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.
	RETAIL MERCHANDISING.					
1	Automotive	Stores, No.	69	505	426	2,323
		Sales, $	1,786,400	17,632,500	11,692,500	71,108,200
2	Food	Stores, No.	307	2,724	1,655	14,508
		Sales, $	2,163,900	23,799,000	14,461,800	188,269,200
3	General merchandise	Stores, No.	165	991	787	4,448
		Sales, $	6,277,300	26,492,200	31,078,900	147,100,800
4	Apparel	Stores, No.	53	457	289	3,037
		Sales, $	1,012,800	8,707,100	5,823,000	57,807,200
5	Lumber	Stores, No.	9	158	112	955
		Sales, $	363,000	4,241,400	3,294,400	31,287,500
6	Furniture	Stores, No.	6	93	59	539
		Sales, $	44,100	2,078,600	2,045,400	18,939,800
7	Restaurant	Stores, No.	26	239	187	1,125
		Sales, $	186,500	1,820,100	1,221,500	19,768,200
8	All other stores	Stores, No.	159	1,016	779	6,143
		Sales, $	1,722,700	19,370,000	15,388,800	132,892,60
	Totals	**Stores, No.**	**794**	**6,183**	**4,294**	**33,078**
		Sales, $	**13,556,700**	**104,140,900**	**85,006,300**	**667,173,500**
	SERVICE ESTABLISHMENTS.					
9	Amusements	Estab., No.	13	134	117	509
		Receipts, $	193,800	2,097,300	1,307,200	11,868,300
10	Cartage and storage	Estab., No.	39	58	52	404
		Receipts, $	29,100	1,082,800	200,900	7,201,000
11	Domestic service	Estab., No.	19	144	108	1,177
		Receipts, $	75,200	934,000	799,000	10,675,800
12	Personal services	Estab., No.	61	344	360	2,956
		Receipts, $	75,200	681,000	582,000	6,460,600
13	Photography	Estab., No.	5	32	24	194
		Receipts, $	11,700	156,400	150,100	1,250,400
14	Repair	Estab., No.	145	601	545	4,047
		Receipts, $	138,100	872,500	825,800	7,640,900
15	Transportation	Estab., No.	5	47	80	556
		Receipts, $	13,900	243,500	357,800	4,230,600
16	All other establishments	Estab., No.	24	135	104	937
		Receipts, $	40,500	721,600	306,600	10,149,700
	Totals	**Estab., No.**	**311**	**1,495**	**1,390**	**10,780**
		Receipts, $	**577,500**	**6,789,100**	**4,529,400**	**59,477,300**

lishments in Canada, by Provinces and Business Groups, 1930.

and subject to revision.

Ontario.	Manitoba.	Saskat-chewan.	Alberta.	British Columbia.	Yukon and Northwest Territories.	Canada.	No.
5,637 169,899,800	720 20,424,700	1,213 23,646,200	1,036 31,764,100	1,090 33,766,500	- -	13,019 381,720,900	1
13,733 254,077,700	2,069 26,391,900	1,730 24,893,300	1,879 27,349,500	3,220 47,779,400	7 226,000	41,832 609,411,700	2
3,709 238,338,000	1,010 81,829,000	1,745 61,759,800	1,358 54,154,000	1,029 64,382,200	100 2,643,800	15,342 714,056,000	3
4,438 92,033,600	436 9,588,600	369 7,855,700	477 9,945,000	756 17,285,300	- -	10,312 209,518,300	4
2,084 65,610,100	406 11,873,800	1,206 21,693,600	734 15,190,900	375 12,103,900	6 76,800	6,045 165,915,400	5
970 24,458,800	52 1,487,900	86 1,677,600	87 2,907,300	191 4,837,500	- -	2,083 58,477,000	6
2,413 30,583,200	391 6,143,800	701 7,079,400	639 9,224,900	672 10,997,700	3 80,900	6,396 87,106,200	7
9,404 237,732,100	1,562 34,880,400	3,678 44,297,300	2,210 33,721,300	1,948 58,371,100	14 134,000	26,913 578,510,300	8
42,388 **1,112,733,300**	**6,646** **192,620,100**	**10,728** **192,902,900**	**8,420** **184,257,000**	**9,281** **249,523,600**	**130** **3,161,500**	**121,942** **2,805,075,800**	
1,165 22,173,600	221 4,920,900	447 2,882,000	346 3,301,500	277 5,511,000	- -	3,229 54,255,600	9
938 10,179,400	139 2,167,300	390 1,110,100	232 1,566,400	205 2,376,800	- -	2,457 25,913,800	10
1,967 16,137,200	300 2,754,600	316 1,464,000	329 2,021,600	531 4,616,500	4 15,600	4,895 39,493,500	11
4,137 10,564,700	561 1,272,900	708 1,420,800	593 1,285,700	878 2,094,500	4 6,600	10,602 24,444,000	12
319 2,358,600	52 297,800	55 252,400	57 374,000	106 570,200	- -	844 5,421,600	13
4,246 10,365,500	861 1,624,000	1,312 1,710,500	925 1,787,600	819 2,517,200	4 5,900	13,505 27,488,000	14
1,008 12,697,100	123 1,511,500	85 487,800	123 1,333,000	198 3,195,400	3 97,200	2,228 24,167,800	15
1,064 15,750,400	178 1,928,200	321 1,135,700	238 1,809,100	330 3,078,100	3 11,000	3,334 34,930,900	16
14,844 **100,226,500**	**2,435** **16,477,200**	**3,634** **10,463,300**	**2,843** **13,478,900**	**3,314** **23,959,700**	**18** **136,300**	**41,094** **236,115,200**	



Retail Merchandising.—The total sales made by 121,942 retail merchandising establishments in Canada in 1930 were $2,805,075,800. In addition to the sales made by these stores, the manufacturing bakeries and dairies reported retail sales of $81,310,588, not included in the figures of Table **32**, showing retail merchandising by provinces. The province of Ontario led in amount of business with 39·68 p.c. of the total sales, although only 33·08 p.c. of the population of the Dominion resided in this province in 1931. On a per capita basis, retail merchandise sales show wide differences between provinces. The average for Canada on the basis of the 1931 population was $270.32, but the per capita sales in Prince Edward Island were $153.98, and in British Columbia $359.40. It should be noted, however, that in these figures no allowance is made for the mail order or other sales outside the province.

32.—Retail Merchandise Trade in Canada, by Provinces, 1930.

NOTE.—Figures are preliminary and subject to revision.

Province.	Stores.	Proportion of Total Stores.	Employees.	Salaries and Wages.	Net Sales.	Proportion of Total Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	p.c.	No.	$	$	p.c.	$
Prince Edward Island	794	0·65	1,394	1,144,200	13,556,700	0·48	3,283,000
Nova Scotia	6,183	5·07	10,060	8,760.000	104,140,900	3·71	19,086,100
New Brunswick	4,294	3·52	8,121	7,357,600	85,006,300	3·03	14,780,200
Quebec	33,078	27·13	78,768	75,750,100	667,173,500	23·78	124,971,500
Ontario	42,388	34·76	122,886	127,455,600	1,112,733,300	39·68	181,877,400
Manitoba	6,646	5·45	21,091	22,092,400	192,620,100	6·87	28,851,400
Saskatchewan	10,728	8·80	17,942	18,211,100	192,902,900	6·89	44,749,000
Alberta	8,420	6·90	17,125	18,924,200	184,257,000	6·57	37,890,600
British Columbia	9,281	7·60	26,673	28,586,900	249,523,600	8·88	39,984,200
Yukon and Northwest Territories	130	0·12	394	349,500	3,161,500	0·11	1,716,600
Canada	**121,942**	**100·00**	**304,454**	**308,631,600**	**2,805,075,800**	**100·00**	**497,190,000**

More than one-quarter of the total sales in 1930 were made by stores in the general merchandise group. The most important kinds of stores in this group were the department stores and the general stores with groceries. The sales of food stores, of which the most numerous and important are the grocery stores, formed 21·72 p.c. of the total, while those of the automotive group accounted for 13·61 p.c. While such proportions are indicative of the sales of commodities, they do not furnish an accurate guide to commodity sales. Few stores restrict their sales to one line of goods and some kinds of stores handle a wide variety of merchandise. Department and general stores, as is well known, deal in many commodities, but there are other stores which also carry many lines of goods. The figures that are given in Table **33** show the retail merchandise trade by group and kind of business.

33.—Retail Merchandise Trade in Canada, by Group and Kind of Business, 1930.

Note.—Figures are preliminary and subject to revision.

Group and Kind of Business.	Stores.	Employees.	Salaries and Wages.	Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	$
General Merchandise.					
Department stores and general stores doing over $100,000 of business	373	50,537	53,959,900	399,407,900	63,294,900
Dry goods stores	1,800	3,093	2,601,300	26,782,100	12,575,100
Other general stores with grocery departments	12,146	16,281	12,905,700	228,986,800	78,365,200
Other general stores without grocery departments	584	2,253	2,238,400	18,916,100	7,754,000
Variety, 5 and 10 cent and to-a-dollar stores	428	7,959	4,280,800	39,672,500	5,618,600
Army and navy stores	11	27	41,800	290,600	121,200
Totals	**15,342**	**80,150**	**76,027,900**	**714,056,000**	**167,729,000**
Clothing and Apparel.					
Men's and boys' clothing stores	227	548	783,400	6,576,100	1,625,500
Men's furnishing stores	564	824	903,900	8,820,300	3,681,100
Men's clothing and furnishing stores	1,380	3,605	4,819,800	40,640,400	16,790,500
Hat and cap stores (men's and boys')	58	109	170,200	1,443,500	388,400
Children's specialty shops	47	92	77,100	513,000	212,300
Women's ready-to-wear stores	1,428	5,435	5,369,100	44,410,100	9,384,200
Clothing stores (men's, women's and children's)	960	3,140	3,260,700	29,469,500	11,170,400
Millinery shops	1,334	1,585	1,042,400	6,791,900	994,900
Shoe stores (men's)	34	96	156,900	1,024,000	328,200
Shoe stores (women's)	32	146	228,000	1,685,700	498,000
Shoe stores (men's, women's and children's)	1,578	3,456	3,921,200	33,633,500	13,805,100
Furriers—fur shops	346	1,795	2,183,400	12,068,000	3,792,900
Custom tailors	1,678	3,395	3,391,300	14,558,100	2,824,700
Dressmakers and ladies' tailors	198	472	420,100	1,387,700	261,100
Hosiery shops	73	158	161,800	1,377,200	282,400
Knit goods stores	88	199	151,800	1,515,100	605,200
Corsets and lingerie shops	238	663	441,200	3,896,500	1,015,300
Infants' wear shops	49	35	18,000	247,700	127,400
Totals	**10,312**	**25,753**	**27,500,300**	**210,058,300**	**67,787,600**

33.—Retail Merchandise Trade in Canada, by Group and Kind of Business, 1930—continued.

NOTE.—Figures are preliminary and subject to revision.

Group and Kind of Business.	Stores.	Employees.	Salaries and Wages.	Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	$
FURNITURE AND HOUSE FURNISHINGS.					
Furniture stores	1,061	3,438	4,578,400	36,695,000	11,421,000
Drapery, curtain and upholstery stores	27	85	91,300	479,800	124,600
Floor covering stores	40	115	161,300	1,173,300	768,000
China, glassware and crockery stores	135	371	443,200	1,903,100	849,500
Household appliance stores (electric)	381	2,057	2,255,400	9,618,300	1,814,200
Household appliance stores (gas and electric)	66	475	604,400	3,620,400	668,300
Refrigerators (gas and electric)	11	44	49,000	380,900	46,400
Antique and used furniture stores	105	217	260,500	1,304,400	1,185,300
Awnings, flags, banners, etc	19	42	46,300	168,100	36,600
Brooms and brushes	14	84	36,700	86,900	9,800
Interior decorators	16	118	163,800	614,100	111,300
Lamps and shades	12	10	6,900	33,100	12,200
Pictures and framing	80	144	161,100	676,000	317,400
Stoves and ranges	91	205	265,200	1,321,300	385,000
Other house furnishing stores	25	50	60,200	402,300	129,100
Totals	**2,083**	**7,455**	**9,183,700**	**58,477,000**	**17,878,700**
LUMBER AND BUILDING MATERIALS.					
Lumber and building material dealers	1,811	7,105	9,578,300	73,601,600	18,566,600
Roofing material dealers	87	165	159,700	664,400	76,300
Electric stores	225	644	724,000	3,827,000	1,052,700
Hardware stores	2,958	7,133	8,338,900	72,027,600	27,914,200
Heating appliance and oil burner dealers	95	514	674,900	2,734,500	359,500
Plumbing, heating and ventilating shops	562	1,285	1,565,500	7,626,900	1,240,700
Glass and mirror stores	36	95	118,900	493,400	71,800
Paint and glass stores	271	789	940,700	4,760,000	1,554,000
Totals	**6,045**	**17,730**	**22,100,900**	**165,735,400**	**50,835,800**
FOODS.					
Bakeries (incomplete)[1]	1,054	2,280	1,822,600	9,816,400[1]	309,400
Caterers	8	70	53,900	172,600	6,400
Candy stores	228	529	432,700	3,081,200	96,900
Confectionery stores (candy and fountain)	22	15	10,900	130,800	16,200
Confectionery stores (ice cream)	7,226	4,545	2,966,000	37,242,100	3,810,500
Confectionery and fruit stores	1,167	901	593,300	9,192,900	1,019,900
Dairy products (butter, cheese and milk)	183	473	515,700	4,938,600	98,900
Egg and poultry dealers	225	184	157,600	2,338,600	141,100
Milk dealers (incomplete)[2]	853	3,724	4,572,600	25,430,700[2]	628,000
Delicatessen stores	208	356	285,000	2,496,700	105,100
Fruit and vegetable stores	1,422	1,553	1,135,400	14,307,800	640,200
Grocery stores without meat departments	18,057	17,853	13,023,300	237,154,400	24,930,300
Grocery stores with meat departments	3,481	10,918	9,909,100	125,090,200	8,091,900
Meat markets	4,756	6,803	5,872,300	70,282,900	1,927,100
Meat markets with groceries	2,315	5,577	5,017,500	57,767,400	3,053,600
Fish markets	356	611	506,400	4,678,500	215,500
Coffee, tea and spice stores	118	372	462,700	2,531,400	510,400
Coffee and tea stores with china	16	43	36,700	350,500	177,600
General food stores	6	14	12,500	125,000	13,700
Food stores with non-food departments	131	254	175,000	2,283,000	516,000
Totals	**41,832**	**57,075**	**47,561,200**	**609,411,700**	**46,308,700**
RESTAURANTS.					
Cafeterias	37	828	803,700	3,133,100	55,800
Restaurants	2,815	16,038	12,295,700	57,972,100	1,415,400
Lunch counters	577	642	332,100	2,618,800	146,900
Lunch rooms	2,610	5,016	3,451,700	21,226,400	1,095,300
Fountain-and-lunch stands	76	361	260,700	1,589,600	60,800
Soft drink stands	281	165	71,800	566,200	50,200
Totals	**6,396**	**23,050**	**17,215,700**	**87,106,200**	**2,824,400**

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[1] In addition, bakeries reporting to the Census of Industry had retail sales of $50,339,853.

[2] In addition, dairies reporting to the Census of Industry had retail sales of $30,970,735.

33.—Retail Merchandise Trade in Canada, by Group and Kind of Business, 1930—concluded.

NOTE.—Figures are preliminary and subject to revision.

Group and Kind of Business.	Stores.	Employees.	Salaries and Wages.	Net sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	$
AUTOMOTIVE GROUP.					
Motor vehicle dealers	2,366	17,087	24,557,700	245,830,100	26,546,800
Used car establishments	73	151	165,700	1,778,700	175,500
Accessory, tire and battery shops	159	438	561,700	3,856,500	814,700
Battery, brake and electrical shops	86	204	238,000	1,188,800	188,300
Tire shops	139	222	273,900	2,369,900	326,000
Filling stations	2,027	2,683	2,690,300	24,815,300	1,004,000
Filling stations (accessories and refreshments)	2,629	2,748	2,392,000	27,163,000	1,555,500
Garages	5,260	10,068	10,545,600	71,379,400	5,459,600
Body, fender and paint shops	9	24	26,400	78,400	11,200
Radiator shops	5	17	21,400	76,900	7,200
Bicycle shops	158	142	132,700	875,600	239,200
Bicycle and motorcycle shops	50	119	135,200	1,097,100	244,600
Motorcycle shops	18	62	74,900	528,400	104,700
Motor-boat dealers	32	64	78,300	469,900	210,400
Aircraft and accessory shops	8	27	31,400	212,900	78,300
Totals	**13,019**	**34,056**	**41,925,200**	**381,720,900**	**36,966,000**
OTHER RETAIL STORES.					
Book stores and circulating libraries	289	896	995,900	4,843,600	1,906,600
News dealers and stationers	390	1,000	756,300	5,767,100	1,516,100
Coal and wood dealers	2,387	9,955	10,920,100	97,241,700	8,066,300
Ice dealers	263	1,425	919,100	2,680,700	260,200
Drug stores without fountain	2,825	6,546	7,077,500	55,131,500	18,303,600
Drug stores with fountain	736	2,890	3,087,900	21,581,100	5,122,300
Feed stores	1,233	1,958	1,924,500	33,108,800	3,917,400
Farm implement and machinery dealers	3,379	2,583	3,114,200	29,569,600	7,267,200
Farm implements (agencies)	1,393	46	37,500	1,952,600	102,100
Farm implements, autos, gas, oil, etc.	767	1,060	1,050,100	14,109,300	2,831,700
Florists	689	1,909	1,943,900	9,221,300	869,900
Art and gift shops	141	263	216,600	1,520,300	686,900
Game and toy stores	7	14	7,200	63,500	18,600
Novelty and souvenir shops	194	262	198,800	1,789,900	702,900
Jewellery stores	1,524	3,805	4,992,100	29,224,400	16,805,900
Leather and findings stores	26	39	48,600	383,200	97,000
Luggage and leather goods stores	79	244	279,800	1,699,100	581,400
Harness shops	577	180	142,700	1,851,300	859,200
Musical instrument and music stores	113	203	285,200	1,249,300	637,200
Musical instrument and radio stores	358	2,178	3,260,200	19,756,500	3,591,400
Electrical and radio stores	570	1,613	2,024,900	14,185,900	2,288,300
Office and school supply dealers	69	354	491,100	2,782,000	780,100
Office and store furniture and equipment dealers	71	613	1,099,400	5,122,900	957,700
Office appliance dealers	121	884	1,635,500	6,176,400	1,218,400
Store fixture dealers	5	18	23,000	118,700	65,100
Typewriter dealers	73	861	1,389,100	3,933,700	1,056,400
Athletic and playground equipment dealers	4	17	22,100	147,000	41,000
Opticians	322	459	696,800	3,183,100	535,800
Scientific and medical instrument dealers	39	244	363,000	1,926,600	592,900
Seeds, bulbs and nursery stock stores	121	1,018	588,000	3,116,000	665,500
Sporting goods stores	102	236	357,200	2,878,900	797,000
Sporting goods and toy stores	32	61	59,100	570,800	168,300
Tobacco stores and news-stands	650	695	557,000	8,038,900	1,129,100
Tobacco stands (hotels, etc.)	631	682	609,200	4,789,200	656,900
Tobacco stores without foods	489	809	1,103,100	10,976,300	1,495,100
Tobacco stores with foods	609	543	485,300	6,740,500	983,800
Liquor stores and taverns	1,243	5,838	7,905,300	131,375,700	8,963,300
Not otherwise specified	3,052	5,355	5,130,100	30,745,800	7,472,700
Totals	**25,573**	**57,756**	**65,797,400**	**569,553,200**	**104,011,900**
SECOND HAND STORES. **Totals**	**1,340**	**1,429**	**1,319,300**	**8,957,100**	**2,847,900**
Grand Totals	**121,942**	**304,454**	**308,631,600**	**2,805,075,800**	**497,190,000**

Retail merchandising in Canada is analysed by type of operation in Table **34.** This analysis is first applied to all retail stores and, following this, to some particular kinds of retail business which have been most subject to chain system organization. Single stores under independent ownership accounted for 71·52 p.c. of the total retail merchandise sales in 1930. Included in this percentage are the sales of single stores in voluntary chains or co-operative buying organizations, which amounted to 4·09 p.c. of the total. The sales of the units of sectional and national chains were 18·91 p.c. of the total and those of local chains 1·82 p.c. Two- and three-store multiples accounted for 7·75 p.c. of the total sales. For certain of the larger cities, the business of department stores belonging to national organizations has been taken with that of independent stores.

34.—Types of Operation of Stores Engaged in Retail Merchandising in Canada, 1930.

NOTE.—Figures are preliminary and subject to revision.

Type of Operation.	Stores.	Employees.	Salaries and Wages.	Net Sales.	Proportion of Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	p.c.	$
ALL STORES.						
Single store independents	102,514	210,633	209,737,600	1,891,472,200	67·43	355,583,400
Single stores (in voluntary chains)	4,514	9,076	7,529,500	114,788,000	4·09	21,178,700
Two-store multiples	3,404	15,753	19,044,400	151,187,100	5·38	29,635,100
Three-store multiples	1,233	7,413	8,572,800	65,932,200	2·37	12,560,400
Local chains (4 stores and over)	1,001	5,643	6,189,800	50,942,800	1·82	5,828,900
Sectional and national chains	9,276	55,936	57,557,500	530,753,500	18·91	72,403,500
Totals	**121,942**	**304,454**	**308,631,600**	**2,805,075,800**	**100·00**	**497,190,000**
DRUG STORES.						
Single store independents	2,829	6,263	6,259,500	50,821,100	66·24	17,158,800
Single stores (in voluntary chains)	26	81	90,800	654,700	0·86	208,300
Two-store multiples	313	1,143	1,198,000	8,150,900	10·63	2,431,000
Three-store multiples	96	377	420,000	2,423,700	3·16	685,000
Local chains (4 stores and over)	122	625	732,600	4,538,900	5·91	815,800
Sectional and national chains	175	947	1,464,500	10,123,300	13·20	2,127,000
Totals	**3,561**	**9,436**	**10,165,400**	**76,712,600**	**100·00**	**23,425,900**
FILLING STATIONS.						
Single store independents	3,776	2,770	2,153,700	31,470,400	60·55	1,883,700
Two-store multiples	83	235	242,000	2,413,400	4·65	104,100
Three-store multiples	48	132	136,700	1,593,100	3·06	74,500
Local chains (4 stores and over)	47	96	96,300	1,126,900	2·16	18,400
Sectional and national chains	702	2,198	2,453,600	15,374,500	29·58	478,800
Totals	**4,656**	**5,431**	**5,082,300**	**51,978,300**	**100·00**	**2,559,500**
GROCERY STORES.						
Single store independents	14,703	9,533	6,475,000	130,806,200	55·15	17,011,200
Single stores (in voluntary chains)	1,983	3,252	2,295,200	39,520,200	16·67	3,868,100
Two-store multiples	185	359	308,100	4,049,800	1·71	394,800
Three-store multiples	65	182	163,200	2,012,100	0·85	175,000
Local chains (4 stores and over)	202	780	630,400	9,388,600	3·95	485,600
Sectional and national chains	919	3,747	3,151,400	51,377,500	21·67	2,995,600
Totals	**18,057**	**17,853**	**13,023,300**	**237,154,400**	**100·00**	**24,930,300**

34.—Types of Operation of Stores Engaged in Retail Merchandising in Canada, 1930 —concluded

NOTE.—Figures are preliminary and subject to revision.

Type of Operation.	Stores.	Employees.	Salaries and Wages.	Net Sales.	Proportion of Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	p.c.	$
COMBINED GROCERY AND MEAT STORES.						
Single store independents	3,742	7,229	6,166,000	80,589,200	44·07	5,717,400
Single stores (in voluntary chains)	793	2,363	2,153,300	27,493,800	15·03	1,845,500
Two-store multiples	150	549	563,800	5,579,400	3·06	344,300
Three-store multiples	51	215	243,700	2,269,100	1·24	163,600
Local chains (4 stores and over)	65	444	500,800	4,319,300	2·36	190,100
Sectional and national chains	995	5,685	5,299,000	62,606,800	34·24	2,884,600
Totals	**5,796**	**16,495**	**14,926,600**	**182,857,600**	**100·00**	**11,145,500**
RESTAURANTS.						
Single store independents	5,665	16,977	12,128,200	63,606,800	73·50	2,310,300
Single stores (in voluntary chains)	6	14	9,600	82,000	0·10	700
Two-store multiples	139	1,563	1,350,100	5,530,300	6·39	103,200
Three-store multiples	32	430	342,300	1,517,700	1·75	13,600
Local chains (4 stores and over)	47	885	864,300	3,312,600	3·83	122,600
Sectional and national chains	226	3,016	2,449,400	12,490,600	14·43	223,800
Totals	**6,115**	**22,885**	**17,143,900**	**86,540,000**	**100·00**	**2,774,200**
SHOE STORES.						
Single store independents	1,200	1,976	2,312,700	19,782,600	54·44	9,145,400
Single stores (in voluntary chains)	76	233	305,100	2,787,200	7·67	1,298,400
Two-store multiples	87	279	405,300	3,084,000	8·48	1,282,800
Three-store multiples	74	298	355,800	2,671,000	7·34	979,500
Local chains (4 stores and over)	46	170	178,500	1,373,100	3·78	445,100
Sectional and national chains	161	742	748,700	6,645,300	18·29	1,480,100
Totals	**1,644**	**3,698**	**4,306,100**	**36,343,200**	**100·00**	**14,631,300**
WOMEN'S READY-TO-WEAR STORES.						
Single store independents	1,452	4,061	4,058,100	34,873,300	68·12	8,491,400
Two-store multiples	142	611	728,800	5,006,200	9·78	1,096,200
Three-store multiples	61	655	514,800	3,672,900	7·17	585,800
Local chains (4 stores and over)	31	112	80,300	703,700	1·37	155,300
Sectional and national chains	141	1,016	741,900	6,942,800	13·56	958,400
Totals	**1,827**	**6,455**	**6,123,900**	**51,198,900**	**100·00**	**11,287,100**

The retail merchandise trade in Canadian cities of over 10,000 population is shown in Table 35. The cities are arranged in descending order according to their 1931 census populations. A notable feature of these figures is the wide variation in different cities in the relationship between population and retail sales. In general per capita sales are high for cities which form distributing centres for large or populous areas, while such sales are lowest in residential or industrial satellite cities adjacent to larger centres, as in the case of St. Boniface, Man., Sandwich, Ont., and Verdun, Outremont, Westmount and Hull, Que.

35.—Retail Merchandise Trade in Cities of 10,000 Population and over, 1930.

NOTE.—Figures are preliminary and subject to revision.

City.	1931 Population.	Stores.	Employees.	Salaries and Wages.	Net Sales.	Stocks on Hand, End of Year (at Cost).
	No.	No.	No.	$	$	$
Montreal	818,577	11,966	49,915	51,763,800	387,807,700	57,244,300
Toronto	631,207	8,869	45,918	52,982,900	373,775,300	47,929,800
Vancouver	246,593	3,734	15,270	16,232,700	123,872,500	17,586,500
Winnipeg	218,785	2,614	15,611	17,526,000	136,658,000	16,108,300
Hamilton	155,547	2,100	7,710	8,137,200	66,319,500	9,693,100
Quebec	130,594	1,730	6,222	5,731,000	48,642,000	9,910,500
Ottawa	126,872	1,527	7,349	7,748,400	58,749,800	10,369,700
Calgary	83,761	1,140	5,049	6,268,000	50,616,400	8,493,300
Edmonton	79,197	1,047	4,149	4,730,100	37,185,200	6,138,600
London	71,148	1,101	4,070	4,432,000	35,417,000	5,082,900
Windsor, Ont	63,108	901	3,443	4,362,200	28,906,400	4,585,700
Verdun	60,745	544	1,478	1,443,000	12,024,200	1,417,000
Halifax	59,275	883	3,294	3,373,900	31,187,900	4,331,600
Regina	53,209	590	3,564	4,225,000	34,530,200	5,655,200
Saint John	47,514	815	2,733	2,592,000	21,672,000	3,247,700
Saskatoon	43,291	555	2,900	3,341,100	27,438,600	4,739,800
Victoria	39,082	759	3,323	3,665,200	27,139,000	5,015,200
Three Rivers	35,450	432	1,256	1,083,800	10,193,700	1,898,000
Kitchener	30,793	397	1,411	1,502,500	13,350,500	1,962,400
Brantford	30,107	446	1,550	1,574,000	13,834,700	1,973,500
Hull	29,433	438	1,010	775,100	7,870,600	1,318,500
Sherbrooke	28,933	390	1,229	1,246,600	10,980,400	2,067,500
Outremont	28,641	122	414	439,700	3,743,400	463,400
Fort William	26,277	326	1,048	1,024,300	9,749,700	1,695,800
St. Catharines	24,753	427	1,513	1,631,400	13,984,000	2,318,500
Westmount	24,235	134	663	832,900	5,740,700	595,000
Kingston	23,439	367	1,437	1,453,200	12,273,600	2,083,100
Oshawa	23,439	271	869	892,200	7,732,000	1,154,700
Sydney	23,089	321	805	758,200	8,609,700	1,655,200
Sault Ste. Marie	23,082	327	839	862,100	9,071,200	1,751,400
Peterborough	22,327	371	1,353	1,291,500	11,277,600	1,772,900
Moose Jaw	21,299	300	1,100	1,269,300	9,909,900	1,631,600
Guelph	21,075	305	940	980,900	8,880,400	1,350,000
Glace Bay	20,706	218	400	298,700	4,129,700	693,000
Moncton	20,689	260	1,771	1,787,100	20,703,500	2,279,300
Port Arthur	19,818	242	865	997,900	8,710,700	1,863,000
Niagara Falls	19,046	353	1,228	1,213,500	11,064,300	1,476,300
Lachine	18,630	267	546	493,400	4,497,700	948,900
Sudbury	18,518	235	841	1,020,300	10,045,900	1,618,200
Sarnia	18,191	254	837	767,000	7,534,600	1,217,500
Stratford	17,742	255	873	865,000	7,389,100	1,238,400
New Westminster	17,524	275	965	1,159,100	10,545,200	1,355,400
Brandon	17,082	218	926	958,900	7,674,700	1,542,600
St. Boniface	16,305	110	209	200,300	2,079,900	198,000
North Bay	15,528	197	734	734,800	6,435,700	1,044,700
St. Thomas	15,430	258	890	806,400	6,623,800	1,292,700
Shawinigan Falls	15,345	172	395	345,000	3,476,600	883,600
Chatham, Ont	14,569	277	932	903,900	8,208,100	1,365,600
East Windsor, Ont	14,251	136	248	315,500	3,208,400	515,400
Timmins	14,200	153	468	549,800	5,532,900	1,188,600
Galt	14,006	221	673	622,100	5,270,500	978,300
Belleville	13,790	240	877	848,000	7,577,500	1,368,000
Lethbridge	13,489	210	861	1,026,400	8,481,100	1,446,600
St. Hyacinthe	13,448	201	463	403,100	4,277,900	994,900
Owen Sound	12,839	235	721	638,400	5,603,100	1,153,100
Charlottetown	12,361	205	625	506,800	4,967,200	1,030,900
Chicoutimi	11,877	124	301	296,900	3,251,500	707,700
Levis	11,724	126	289	246,500	2,568,100	565,100
Valleyfield	11,411	148	379	321,900	4,096,400	923,300
Woodstock, Ont	11,395	195	676	622,100	5,621,000	1,009,800
St. Jean	11,256	174	371	311,000	3,510,100	782,600
Cornwall	11,126	217	587	531,800	4,852,900	936,300
Joliette	10,765	176	435	345,900	3,546,000	1,026,600
Sandwich	10,715	83	136	124,700	1,481,100	176,500
Welland	10,709	190	497	512,700	5,285,400	1,024,600
Thetford Mines	10,701	110	230	185,200	1,998,300	510,600
Granby	10,587	128	222	193,600	2,157,500	574,400
Sorel	10,320	169	243	206,800	2,465,600	543,100
Medicine Hat	10,300	142	442	499,100	4,502,700	880,400
Walkerville	10,105	111	281	295,200	2,709,700	388,800

Service Establishments.—The 41,094 service establishments from which reports were secured had receipts of $236,115,200 in 1930. The professional services, such as medicine, dentistry or law, were not included in the census, nor were the building trades, such as carpentry, tinsmithing, etc. A special report is being prepared for hotels and the figures for these establishments are not included in the tables that follow. The provincial distribution of retail services in Canada during 1930 is shown in Table **36.** Ontario again led in the amount of business with 42·45 p.c. of the total service receipts, while Quebec came second with 25·19 p.c.

Among service establishments, the amusements group was the most important, as 22·98 p.c. of the total receipts were reported by establishments of this class. Of the receipts of $54,255,600 for amusement establishments, $39,233,200 were secured by motion picture houses. The next group in importance was that of domestic service, which includes laundries and cleaning, pressing and dyeing shops. The barber shops were the most important section of the personal service group and did more than twice as much business as hairdressing and beauty parlours. The repair and service group had the largest number of establishments. Blacksmith shops were the most numerous, their receipts being only slightly less than the total for boot and shoe repair shops. Repair and service shops for motor vehicles formed an important section of this group.

The salient features of the business of service establishments are given in Table **37,** which also shows the type of operation, *i.e.*, the extent to which these establishments operate independently or are organized in chain systems. Of the total of 41,094 establishments, there were 40,088 under independent operation, while the receipts of single independent establishments formed 77 p.c. of the total of all receipts for services. Except in the case of theatres, which are separately analysed in the table, chain systems were not an important factor in the service field.

36.—Retail Services in Canada, by Provinces, 1930.

Note.—Figures are preliminary and subject to revision.

Province.	Establishments.	Proportion of Establishments.	Employees.	Salaries and Wages.	Receipts.	Proportion of Receipts.	Stocks on Hand, End of Year (at Cost).
	No.	p.c.	No.	$	$	p.c.	$
Prince Edward Island	311	0·75	158	100,000	577,500	0·25	20,400
Nova Scotia	1,495	3·64	1,588	1,304,400	6,789,100	2·87	156,700
New Brunswick	1,390	3·38	1,328	1,013,100	4,529,400	1·92	128,800
Quebec	10,780	26·24	18,276	17,979,000	59,477,300	25·19	1,474,100
Ontario	14,844	36·13	28,036	27,725,300	100,226,500	42·45	2,468,700
Manitoba	2,435	5·92	5,404	4,946,300	16,477,200	6·97	317,700
Saskatchewan	3,634	8·85	2,760	2,496,400	10,463,300	4·43	463,400
Alberta	2,843	6·91	3,622	3,732,300	13,478,900	5·71	381,300
British Columbia	3,344	8·13	7,099	7,689,000	23,959,700	10·15	586,900
Yukon and N.W.T.	18	0·05	30	43,500	136,300	0·06	1,100
Canada	**41,094**	**100·00**	**68,301**	**67,029,300**	**236,115,200**	**100·00**	**5,999,100**

37.—Retail Services in Canada, by Group and Kind of Business and Type of Operation, 1939.

NOTE.—Figures are preliminary and subject to revision.

Group and Kind of Business and Type of Operation.	Establishments.	Employees.	Salaries and Wages.	Receipts.	Stocks on Hand, End of Year (at Cost).
KIND OF BUSINESS.	No.	No.	$	$	$
AMUSEMENTS.					
Billiard and pool halls	1,381	1,268	984,800	5,452,000	351,800
Bowling alleys	155	1,179	799,300	2,320,600	27,900
Motion picture houses	955	6,606	7,567,100	39,233,200	2,300
Other amusement places	738	4,270	2,224,100	7,249,800	88,500
Totals	**3,229**	**13,323**	**11,575,300**	**54,255,600**	**470,500**
BUSINESS SERVICES.					
Totals	**300**	**1,995**	**3,446,000**	**15,511,300**	**66,500**
CARTAGE AND STORAGE.					
Baggage and cartage	1,668	5,370	5,852,300	14,418,100	59,200
Delivery service	77	294	290,200	574,900	7,700
Storage (furniture)	22	348	428,600	867,800	500
Storage (ice and cold)	25	287	418,800	1,218,700	–
Storage (other)	35	383	531,100	1,933,100	22,800
Piano moving	4	10	5,800	21,100	–
Trucking	626	1,834	1,811,400	6,880,100	20,700
Totals	**2,457**	**8,526**	**9,338,200**	**25,913,800**	**110,900**
DOMESTIC SERVICES.					
Cleaning carpets	16	104	126,300	270,300	27,500
Cleaning, dyeing, pressing and repairing	2,272	5,244	5,153,600	13,727,600	138,500
Dyers	11	85	134,800	1,361,500	4,800
General cleaning	5	36	51,300	74,000	–
Coat and towel supplies	39	370	411,100	1,415,100	108,800
Laundries	2,387	11,234	9,531,600	21,565,300	29,900
Window cleaners	30	249	294,800	454,900	–
Hat blocking	12	15	15,400	46,700	1,600
Fur repairing	111	144	113,900	516,200	110,000
Other domestic services	12	21	15,000	61,900	1,900
Totals	**4,895**	**17,502**	**15,847,800**	**39,493,500**	**423,000**
EDUCATIONAL SERVICES.					
Totals	**211**	**617**	**705,600**	**1,985,900**	**80,400**
PERSONAL SERVICES.					
Barber shops	7,755	5,126	4,588,300	16,978,300	302,700
Beauty parlours and hairdressers	2,379	2,252	2,004,300	6,107,400	168,900
Shoe shine parlours	412	624	331,800	1,106,400	46,600
Turkish baths	56	78	70,700	251,900	800
Totals	**10,602**	**8,080**	**6,995,100**	**24,444,000**	**519,000**
PHOTOGRAPHY.					
Totals	**844**	**1,394**	**1,550,500**	**5,421,600**	**420,800**

37.—Retail Services in Canada, by Group and Kind of Business and Type of Operation, 1930—concluded.

NOTE.—Figures are preliminary and subject to revision.

Group and Kind of Business and Type of Operation.	Establishments.	Employees.	Salaries and Wages.	Receipts.	Stocks on Hand, End of Year (at Cost).
	No.	No.	$	$	$
REPAIRS.					
Garages (general repairs)	977	1,115	1,190,100	4,509,800	129,900
Auto battery shops	75	84	86,500	400,200	32,800
Auto brake shops	7	9	5,800	58,300	33,800
Auto ignition and electric shops	27	44	54,200	184,200	18,600
Auto paint shops	121	197	166,300	532,300	21,700
Auto radiator shops	51	106	129,300	334,800	13,100
Auto tire shops	80	67	60,800	347,400	25,800
Auto top and body shops	191	843	660,500	1,614,600	104,300
Auto storage	76	117	121,700	515,600	22,700
Auto washing and polishing	39	89	77,500	192,900	200
Blacksmith shops	5,458	1,148	847,700	7,341,300	644,500
Boot and shoe shops	4,785	1,310	1,014,700	7,914,900	440,400
Bicycle and motorcycle shops	71	19	10,100	121,800	19,400
Harness shops	258	30	18,900	335,700	74,600
Locksmiths	123	44	44,100	305,300	32,200
Radio repair shops	62	51	28,400	146,600	17,400
Upholstery and furniture shops	382	310	283,400	1,183,100	109,400
Watch and jewellery shops	722	218	206,700	1,449,200	405,300
Totals	**13,505**	**5,801**	**5,006,700**	**27,488,000**	**2,146,100**
TRANSPORTATION.					
Auto livery and taxi	1,196	2,929	2,780,200	8,232,600	103,000
Bus and stage lines	149	1,191	1,801,000	5,528,700	1,300
Motor freight	493	2,143	2,443,200	7,779,400	18,300
Trucking (farm produce)	258	74	34,400	516,700	1,500
Other transportation	132	621	663,200	2,110,400	100
Totals	**2,228**	**6,958**	**7,722,000**	**24,167,800**	**124,200**
UNDERTAKING AND BURIAL.					
Totals	**855**	**1,407**	**1,797,300**	**9,377,200**	**1,095,900**
OTHER RETAIL SERVICES.					
Totals	**1,968**	**2,698**	**3,044,800**	**8,056,500**	**541,800**
Grand Totals	**41,094**	**68,301**	**67,029,300**	**236,115,200**	**5,999,100**
TYPE OF OPERATION.					
ALL ESTABLISHMENTS.					
Single independent establishments	40,088	56,883	53,098,400	182,158,200	5,644,600
Single establishments (in voluntary chains)	5	2	800	23,200	14,300
Two-store multiples	362	2,896	3,550,600	13,462,700	211,600
Three-store multiples	131	1,688	1,883,200	5,882,200	33,100
Local chains (4 stores and over)	107	1,145	1,252,800	3,764,800	13,900
Sectional and national chains	401	5,687	7,243,500	30,824,100	81,600
Totals	**41,094**	**68,301**	**67,029,300**	**236,115,200**	**5,999,100**
THEATRES.					
Single independent establishments	673	2,938	3,174,300	14,787,300	2,300
Local multi-units	60	3,956	4,945,900	25,410,700	-
Local chains (4 establishments and over)	30				
Sectional and national chains	203				
Totals	**966**	**6,894**	**8,120,200**	**40,198,000**	**2,300**

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS.

Canada is a country of continental dimensions, nearly 4,000 miles in length from east to west, with its relatively small population of 10,376,786 in the main thinly distributed along the southern borders of its vast area. Different parts of the country are shut off from each other by areas which are almost wildernesses, such as the region lying between New Brunswick and Quebec and the areas north of lakes Huron and Superior, the last dividing the industrial region of Ontario and Quebec from the agricultural areas of the prairies. To such a country with such a population, producing, like our western agriculturists, mainly for export, or, like our manufacturers, largely for consumption in distant portions of the country itself, cheap transportation is a necessity of life. Before 1850, when the water routes were the chief avenues of transportation and were closed by ice for several months each year, the business of the central portions of the country was reduced to a state of relative inactivity during the winter. The steam railway was therefore required for the adequate economic development of Canada, more particularly for linking up with the economic and industrial world the vast productive areas of the Canadian West, and thus promoting their development. The construction of the Canadian Pacific Railway gave to Canada, as an economic unit, length; the building of the newer transcontinental railways has given the country breadth.

Railway transportation, though essential, is nevertheless expensive, particularly in recent years, and for bulky and weighty commodities. Hence new enterprises have either been undertaken or are under consideration for improving water communication, such as the new and deeper Welland canal, the deepening of the St. Lawrence canals and of the channel between Montreal and Quebec, and the development of the Hudson Bay route.

Problems of transportation are, therefore, of vital importance in the economic life of Canada, occupying a large part of the time and thought of our Parliaments and public men. Scarcely less important, from the social and the economic points of view, is the development of methods of communication in a country so vast and so thinly peopled. The Post Office has been a great though little recognized factor in promoting solidarity among the people of different parts of the Dominion, while telegraphs and telephones have gone far to annihilate distance; the rural telephone, in particular, has been of great social and economic benefit in country districts. The use of the automobile has also been of great benefit in promoting social intercourse and in facilitating the transaction of business among the dwellers of both urban and rural districts. The press, again, assisted by cheap telegraph and cable rates, and reaching, through the mails, all parts of the country, has been of use in developing national sentiment. To sum up, it may be said that the progress of modern inventions, not least among which is the radio, has greatly improved living conditions in both rural and urban communities throughout the Dominion.

Part I of this chapter includes a statement of the tendencies toward monopoly which have made it necessary to establish a measure of government control over those transportation and communication agencies which are not govern-mentally-owned and operated; to this is added an account of the origin and functions of the Board of Railway Commissioners. The subsequent parts deal in order with steam railways, electric railways, express companies, roads, motor vehicles, air navigation, canals, shipping, telegraphs, telephones, radio and the Post Office.

PART I.—GOVERNMENT CONTROL OVER AGENCIES OF TRANSPORTATION AND COMMUNICATION.

Private enterprises engaged in the transportation and communication business in Canada have, in the past 50 years, shown the same tendency toward consolidation and amalgamation which has been evident elsewhere throughout the civilized world. The basic reason for such consolidation and amalgamation has been the fact that the business of transportation and communication is, generally speaking, a "natural monopoly", *i.e.*, a type of enterprise in which service can be more efficiently and economically rendered to the public where one or a few concerns control a particular type of service throughout the country. The outstanding example of these consolidations in Canada in our time is the concentration of control of the railways of the country in the hands of the Canadian Pacific Railway Company and the Canadian National Railway Company.

However, since such control brings with it an element of monopoly and possible overcharge which is distasteful to the public, it has in Canada, as in other countries, been deemed advisable to set up authorities controlling the rates to be charged and the other conditions on which services to the public are to be rendered by common carriers. This control, so far as railways within the jurisdiction of the Dominion Government are concerned, has been placed in the hands of the Board of Railway Commissioners, whose authority has been extended to cover various other means of transportation and communication. A brief summary of the history and functions of this body follows on pp. 644-5.

Besides the Board of Railway Commissioners, dealing with the larger public utilities coming under the jurisdiction of the Dominion Government, there exist, in several of the provinces, bodies which undertake among their duties the supervision and control of local public utilities operating under the jurisdiction of the provinces, and the regulation of their rates for service. Among these is the Railway and Municipal Board of Ontario, established in 1906, which controls the construction, operation and maintenance of railways, and the approving of their rates and their rules and regulations affecting the public. Similarly, in Quebec, a Commission of Public Utilities was established in 1909 and was given superintendence over all Quebec corporations, other than municipalities, "that own, operate, manage or control any system, works, plant or equipment for the conveyance of telegraph or telephone messages or for the conveyance of travellers or goods over a railway, street railway or tramway, or for the production, transmission, delivery or furnishing of heat, light or power, either directly or indirectly to or for the public". In Nova Scotia there is a Board of Commissioners of Public Utilities and in Manitoba a Public Utilities Commission with similar functions, while in the three westernmost provinces these same duties are performed by provincial Departments of Railways.

Due to changing conditions and increasing complexities in the transportation field, the Dominion Government appointed in 1931 a Royal Commission to inquire into the whole problem of transportation in Canada, particularly in relation to railways and shipping and communication facilities, having regard to present conditions and the probable future development of the country. (See pp. 648-50.)

The Board of Railway Commissioners for Canada.[1]

In the early days of railway building in Canada, the provinces were more concerned with rapid development than with rate regulation. Under the Railway Clauses Consolidation Act of 1851, rates were fixed by the directors of the railway, subject to the approval of the Governor in Council. Beyond this, competition was relied upon to bring rates to a reasonable level. As time went on, however, those who believed in the efficacy of competition as a regulator were disillusioned. For example, complaints were made that the Grand Trunk gave low through transit rates, say from Chicago to New York, through Canada, and recouped itself by high non-competitive rates in Upper Canada. In 1888, the supervision of rates was assigned to the Railway Committee of the Privy Council, sitting in Ottawa.

At the turn of the century, two reports were prepared for the Department of Railways and Canals by Professor S. J. McLean, the first setting down the experience of railway commissions in England and the United States, and the second discussing Canadian rate grievances, with a recommendation that regulation by commission be adopted in Canada. The second report found that non-competitive rates were exorbitant as compared with competitive rates and that the railways had exercised their right to vary rates without notice, to the great distress of shippers. Among the weaknesses of the Railway Committee as a rate-regulating body was its fixed station at Ottawa, which made the cost of appearing before it practically prohibitive. Besides, members of Parliament had no necessary aptitude for dealing with railway rates, and of their two functions—legislative and administrative—the legislative was to them the more important.

The Board of Railway Commissioners for Canada, as provided for by the amended Railway Act of 1903, was organized on Feb. 1, 1904. In the beginning, its membership consisted of a Chief Commissioner, a Deputy Chief and one Commissioner. In 1908 the membership was increased by the inclusion of an Assistant Chief Commissioner and two other Commissioners. According to the Act, the Board may be divided into two sections of three members but, since any two constitute a quorum, two Commissioners usually hear all but the more important cases, and, agreeing, give the decision of the Board.

The powers of the Commission, in brief, are in matters relating to the location, construction and operation of railways. The most important of these powers has to do with rate regulation. Passenger rates are divided into standard and special, freight rates into standard, special and competitive. Standard rates are maximum rates and the only ones which must be approved by the Board before they are applied. Special and competitive rates, being less than maximum rates, may be applied by railways without the Board's approval, provided that a change of rates has been advertised. But important rate adjustments usually come to the notice of the Commission, for the changed rate alters the extent of the territory in which a shipper can compete and on this account he is apt to appeal the case to the Commission. It is a knotty problem to mark the boundaries of competitive areas—to decide whether Nova Scotian manufacturers should be given rates which would allow them to compete west of Montreal, or again, whether high construction and operation costs in British Columbia should enforce a rate which prevents her goods from moving far into the prairies. By an amendment to the Railway Act, the regulation of telephone, telegraph and express rates was given to the Commission, but with narrower powers than were given to it in dealing with railways.

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[1] Revised by A. D. Cartwright, Secretary, Board of Railway Commissioners for Canada.

The procedure of the Board is informal, as suits the nature of its work, for experience has shown that hearings in strict legal form give the parties to the argument uncompromising attitudes. If possible, matters are settled by recommendations to the railway company or the shipper; thus, during 1932, 98 p.c. of the applications to the Board were settled without formal hearing. The Railway Committee had kept its station at Ottawa, giving only formal hearings, so that the grievances of those who could not afford to appear in person or pay counsel went unredressed. The itineraries of the Railway Commission are arranged so that evidence may be taken at the least expense to those giving it.

The Chief or Assistant Chief Commissioner, depending upon which one is presiding, gives final judgment on points of law when, in the opinion of the Commissioners, the question is one of law. On questions of fact the findings of the Board are final and are not qualified by previous judgments of any other court. Questions of law and jurisdiction are differentiated. In the first case, the Board may, if it wishes, allow an appeal to the Supreme Court; in the second, the applicant needs no permission to present his appeal.

The Railway Committee of the Privy Council, being a Committee of the Cabinet, was responsible to Parliament. When the powers of the Committee were made over to the Railway Commission the responsibility was retained, but necessarily by a different means. There is now provision for an appeal from any decision to the Governor General in Council, who may also of his own motion rescind or vary the action of the Board, but the power to rescind or vary usually consists in referring to the Board for reconsideration. From its inception until Dec. 31, 1932, the Board gave formal hearing to 10,028 cases. Its decision was appealed in 107 cases, 65 of these being to the Supreme Court of Canada and 42 to the Governor General in Council. Of the appeals 12 of those carried to the Supreme Court were allowed and 3 of those to the Governor General in Council.

PART II.—STEAM RAILWAYS.[1]

Section 1.—Historical Sketch.

Construction was begun on the first Canadian railway in 1835. This was a line only 16 miles long between St. Johns and Laprairie, Quebec, intended to expedite the journey between Montreal and New York. It was opened for traffic in 1836, being operated at first with horses, for which steam locomotives were substituted a year later. About the same time, a line 6 miles long was built in Nova Scotia from Stellarton to a loading point on Pictou harbour to haul coal from the mines to vessels. On this line also the motive power was at first provided by horses, but in the spring of 1839 the "Samson", a locomotive built in England, brought over in a sailing vessel, and still preserved in Halifax, was put in operation. A railway from Montreal to Lachine was opened in 1847 and another line to St. Hyacinthe in 1848. In 1850, however, there were only 66 miles of railway in Canada.

Commencement of the Railway Era—The Grand Trunk.—The railway era in Canada may be said to have begun in 1851, when an Act was passed providing for the construction of a main line of railway between the two Canadas. The result was the completion of the Grand Trunk Railway between Montreal and Toronto in 1856, its extension westward to Sarnia in 1859, and eastward to Rivière du Loup in 1860. The Atlantic and St. Lawrence Railway, from Portland, Maine, to the Canadian boundary, was leased for 999 years and in 1859, on the completion of the Victoria bridge across the St. Lawrence at Montreal, the Grand Trunk had a through route 800 miles long from Portland to Sarnia. A line from Detroit to Port Huron was leased in 1859, the Champlain roads in 1863, the Buffalo and Lake Huron in 1867, while the Chicago and Grand Trunk was completed from Port Huron to Chicago in 1880. In 1881 the Georgian Bay and Lake Erie system (171 miles) was incorporated, and in the following year the Great Western (904 miles) and the Midland systems (473 miles) were also incorporated into the Grand Trunk. In 1888 the Northern Railway, which had been opened from Toronto to Barrie in 1853, and the Hamilton and Northwestern Railway were taken over by the Grand Trunk. In 1891 the completion of the St. Clair Tunnel gave direct communication with the railways of the United States. In the 1870's the gauge had been changed from the original 5′ 6″ to the standard gauge of 4′ 8½″.

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[1] Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This branch publishes an annual report on Steam Railways, as well as numerous other reports, for a full list of which the reader is referred to Chapter XXIX of this volume.

Construction of the Intercolonial.—An intercolonial railway between the Maritime Provinces and Canada had been proposed as early as the 1830's. In 1844 the Imperial Government made a survey for a military road, and in 1851 agreed to recommend to Parliament either a guarantee of interest or an advance of the sum required to build a railroad. Differences of opinion as to the route resulted in the project being dropped, but in 1853 Nova Scotia undertook to construct by 1862 a trunk line from Halifax to the New Brunswick frontier, with branch lines to Pictou and Victoria Beach. In both Nova Scotia and New Brunswick, however, the scheme of an intercolonial railway broke down for lack of funds, and in 1867 there were only 374 miles of railway in the Maritimes—229 miles in New Brunswick, including lines from Saint John to Shediac and from St. Andrews to Richmond; 145 miles in Nova Scotia, including lines from Halifax to Truro and Windsor, and from Truro to Pictou. These, under the B.N.A. Act, passed to the Dominion Government. The latter undertook the completion of the railway, and in 1876 the line was opened. In 1879 the Rivière du Loup branch of the Grand Trunk was acquired, and in 1898 the Drummond Counties Railway from Chaudière Junction to Ste. Rosalie Junction was leased and running rights obtained from the latter point over the Grand Trunk tracks into Montreal, the Intercolonial thus becoming a competitor for the business of the commercial metropolis of Canada.

The First Transcontinental Railway—The C.P.R.—As early as 1849 a pamphlet published by Major Carmichael-Smyth advocated the construction of a Canadian Pacific railway nearly along the present route. In 1851 a Parliamentary Committee reported against undertaking the enterprise at that time. In 1871 the terms under which British Columbia entered Confederation bound the Dominion to commence the Pacific railway within two years and complete it within ten years. The building of the railway as a public work actually commenced in 1874, but was not very rapidly pushed forward. In 1880 the Government entered into a contract with the Canadian Pacific Railway syndicate, granting to the syndicate all portions of the line completed or under construction, a cash subsidy of $25,000,000, a land grant of 25,000,000 acres, free admission of materials for construction, and protection for 20 years against competing lines. The company on its side agreed to complete the railway to a fixed standard by May 1, 1891, and thereafter to maintain it efficiently. As a matter of fact the last spike on the main line was driven on Nov. 7, 1885. Like the Grand Trunk, the Canadian Pacific Railway began to acquire branch lines as feeders, among them being the North Shore, Quebec, Montreal, Ottawa and Occidental in 1881; the Winnipeg to Manitou line in 1882; the Ontario and Quebec, the Credit Valley and the Toronto, Grey and Bruce in 1883; the St. Lawrence and Ottawa, and the Manitoba Southwestern in 1884; the North Shore, Nova Scotia, in 1885; the Atlantic and Northwest in 1886; the West Ontario Pacific in 1887; the Sudbury and Sault Ste. Marie in 1888; the New Brunswick Railway and the Columbia and Kootenay in 1890; and the Montreal and Ottawa, and Montreal and Lake Maskinongé in 1892.

The Second Transcontinental—The Grand Trunk Pacific.—About the end of the century the Grand Trunk, which already had a line as far west as Chicago, submitted to the Canadian Government a proposal whereby it might participate in the settlement and development of the West. Lines were to be leased from Chicago *via* Minneapolis to Winnipeg and thence a new line, subsidized by the Government, would be built to the Pacific Coast. The Government raised objections to so much of the line lying in the United States and a second proposal was made for a connecting line with larger subsidies from North Bay to Winnipeg. The Government submitted, in 1903, a counter proposal that the line, instead of terminating at North Bay, should be continued east to Moncton, New Brunswick, the eastern section from Moncton to Winnipeg to be constructed by the Government and leased to the Grand Trunk Pacific for a 50-year period, the railway paying no rent for the first seven years and 3 p.c. on the cost of the railway for the remaining 43 years. The western half of the railway from Winnipeg to Prince Rupert was to be built by the Grand Trunk Pacific, the Government guaranteeing interest on bonds to 75 p.c. of the cost of construction, not exceeding $13,000 per mile on the prairie section and $30,000 per mile on the mountain section. The Grand Trunk reluctantly accepted this proposition and construction of the National Transcontinental and Grand Trunk Pacific commenced.

The Third Transcontinental—The Canadian Northern Railway.—The third transcontinental railway, the Canadian Northern, was begun in 1896 with the completion by Mackenzie and Mann of the 125-mile line of the Lake Manitoba Railway and Canal Co., chartered in 1889. The charters of the Winnipeg and Hudson Bay, the Manitoba and Southeastern, the Ontario and Rainy River, and the Port Arthur, Duluth and Western were next acquired. Assisted by the Manitoba Government, which desired to establish competition with the Canadian Pacific Railway, the Canadian Northern then secured the Manitoba lines of the Northern Pacific and in 1902 completed its line from Winnipeg to Port Arthur. During the following decade, the agricultural west was filling up very rapidly and, with the public of Canada under the influence of this boom, the Canadian Northern Railway was able to secure guarantees of bonds from the Dominion and Provincial Governments to enable it to extend its lines both westward to Vancouver and eastward to Montreal and so complete the great scheme of a transcontinental road.

Effect of the War on the Railways—The Drayton-Acworth Report.—With two new transcontinental main lines, besides branches, under construction Canadian railway mileage was doubled between 1900 and 1915, increasing from 17,657 miles in the former year to 34,882 miles in the latter. The builders of the new lines, as well as the Canadian Government and people, had expected that immigration of capital and labour from Europe would rapidly settle the areas tributary to the new railroads and give them abundant and lucrative traffic, as had been the case with the C.P.R. Instead, the War came, and European labour and capital were conscripted for the struggle; immigration fell off, while cost of operation increased, owing to the scarcity of labour and material in Canada. The interest on the bonds had to be met, and in 1915 the Government felt it necessary to give assistance to the railways. In 1916, after having again made loans to the Grand Trunk Pacific Railway and the Canadian Northern Railway Co., a Royal Commission was appointed by Order in Council of July 13, 1916, to investigate: (1) the general problem of transportation, (2) the status of each of the three transcontinental systems, (3) the reorganization of any of the said systems, or their acquisition by the State, and (4) other matters considered by the Commission to be relevant to the general scope of the inquiry. Alfred Holland Smith of New York, Sir Henry Drayton of Ottawa and Sir George Paish of London, England, were originally appointed to the Commission. On the resignation of the last-named, William M. Acworth, a distinguished English authority on railways, was appointed to take his place. The majority report of the Commission, signed by Sir Henry Drayton and Mr. Acworth, has formed the basis of the subsequent railway policy of Canada. Their recommendation was that the public should take control of the Canadian Northern, of the Grand Trunk Pacific and the Grand Trunk proper, and that they should be administered on purely business principles by a board of trustees, such compensation as seemed proper to be decided by arbitration and given to the shareholders of the Canadian Northern and the Grand Trunk.

The process of the acquisition of these railways and the financial results of their operation down to the end of 1931 are described in Section 3, pp. 664 to 674.

The Royal Commission of 1931.—During 1930 and 1931 both freight and passenger traffic declined until new low records were being established each succeeding month. Freight and passenger revenues consequently decreased at alarming rates and with increasing capital expenditures and fixed charges, the financial condition of Canadian railways demanded readjustment. The dividend rate of the Canadian Pacific Railway was reduced from 10 p.c. to 5 p.c. for the second and fourth quarters of 1931 and early in 1931 it was evident that the Canadian National system would not earn the interest due on public holdings of its debentures exclusive of over $32,000,000 interest on Government loans. To study the situation and, if possible, to remedy it, the Dominion Government appointed a Royal Commission by Order in Council P.C. 2910 dated Nov. 20, 1931. The Commission, under the chairmanship of the Rt. Hon. Lyman P. Duff, Judge of the Supreme Court of Canada, held hearings throughout the country and on Sept. 13, 1932, submitted its report.

The report condemned the unrestricted and extravagant competition of the Canadian National and Canadian Pacific Railways and the lack of co-operation in providing for the transportation needs of the country which resulted in the construction of branch lines, hotels, and other facilities far in excess of the present requirements. The Commission was of the opinion that aggressive competition should cease and its final conclusion was:

> "We feel compelled, as a matter of public duty, to strike a serious note of warning to the people of Canada. Unless the country is prepared to adopt the plan we have proposed, or some other equally effective measures, to secure the efficient and economical working of both railway systems and thereby not only reduce the burden on the Federal Treasury but improve the financial position of the privately owned railway, then the only courses that would be left would be either to effect savings in national expenditures in other directions, or to add still further to the burdens under which the industries of the country are suffering by the imposition of yet further taxation. Failing the adoption of one or other of these courses, and there are obvious limits to their application, the very stability of the nation's finances and the financial credit of the Canadian Pacific Railway will be threatened, with serious consequences to the people of Canada and to those who have invested their savings in that railway".

To effect remedies it recommended:

(1) That the board of directors of the Canadian National Railways be reduced to three trustees (from 17), and that a majority of the trustees, which must include the Chairman, should govern its decisions.

(2) The annual budget of the railway should be under the control of the trustees and should be presented to Parliament for approval. Annual deficits should be voted by Parliament and not raised by the issue of railway securities.

(3) A continuous audit should be made by independent auditors appointed by Parliament.

(4) A statutory duty should be imposed upon the trustees of the Canadian National and upon the Board of Directors of the Canadian Pacific Railway to adopt as soon as practicable such co-operative measures, plans, and arrangements as may be best adapted to the removal of unwarranted duplication and unnecessary services and facilities and to co-operate and use jointly all facilities as far as feasible.

(5) To facilitate co-operation, an arbitral tribunal composed of the Chief Commissioner of the Board of Railway Commissioners as chairman and a representative from each of the railways should be appointed to settle disputes between the railways, especially as to co-operative measures or arrangements. The tribunal may be increased by an additional representative from each railway when deemed desirable by the railways. The tribunal should have jurisdiction in relation to the following matters:

(a) Joint use of terminals.
(b) Running rights and joint use of tracks where there are actual or functional duplications, or where such may be avoided.
(c) Control and prohibition in respect of the construction of new lines and provision of facilities and additional services where no essential need of the public is involved.
(d) The joint use of facilities where this would promote economy or permit the elimination of duplication or unremunerative services or facilities.
(e) Abandonment of lines, services or facilities.
(f) Pooling of any part or parts of freight traffic or of passenger traffic.
(g) Things necessarily incidental to the above enumerated matters.

Whilst all members of this Commission concur in these recommendations which, if carried out in letter and spirit by all concerned (the Government, the public and the railways), should effect a considerable measure of relief to the taxpayers of Canada, some members would have preferred a plan which would have established a complete disassociation of the Government of Canada from the responsibilities of competitive railway management or of any direct interest therein.

The Commission also suggested a joint inquiry by the Dominion and Provincial Governments into regulation and taxation of motor vehicles using the highways. During the following session of the Dominion Parliament (1933), legislation known as The Canadian National-Canadian Pacific Act, 1933, was passed implementing the report of the Commission.

Under this Act the Board of Directors of the Canadian National Railways is replaced by a board of three trustees, the chairmanship of which is a full time position. The members are appointed for terms of five years and shall not be removed from office unless for assigned cause and on Address of the Senate and House of Commons. Decisions of the majority which must include the chairman will prevail. The trustees must submit each year estimates of requirements to Parliament through the Finance Minister and income deficits shall not be funded. The trustees shall also present annual reports to Parliament through the Minister of Railways and Canals. Continuous audit shall be made by independent auditors appointed annually by Parliament.

Under Part II of the Act the Canadian National and Canadian Pacific Railways are required to co-operate as recommended by the report of the Commission and, in addition, the railways shall divide the employment of such co-operative activities between the employees of the two railways, the division to be made by negotiations with the employees.

The co-operative measures may include:—

(*a*) New companies controlled by stock ownership, equitably apportioned between the companies;
(*b*) Leases, entrusting agreements, or licences, or agreements for pooling and division of earnings arising from the joint operation of any part or parts of freight or passenger traffic, or express, telegraph, or other operating activities or services;
(*c*) Joint trackage, running rights, joint ownership, or joint operating agreements, depending upon the nature of the property or services included in any co-operative plan;
(*d*) Joint or individual highway services, or highway and railway services combined, in any form.

In the formation of any new company, the employees in any services taken over by the new company shall be given preference.

Under Part III provision is made for the erection of a tribunal with jurisdiction as recommended by the Commission, except that clause (*e*) "abandonment of lines, services and facilities" is struck out.

The powers of the tribunal may be invoked by either company and decisions of the presiding officer and one member shall be final and binding on both railways, even if one railway fails to appoint a representative. The orders of the tribunal shall be binding and enforced in the same manner as orders of the Board of Railway Commissioners and shall not be subject to appeal except as to jurisdiction and only to the Supreme Court of Canada. Where an order of the tribunal conflicts with an order of the Board of Railway Commissioners the former shall prevail. Where a dispute is of substantial concern to the public, or affects any province, the presiding officer shall give due notice and the interested persons may be heard at the sitting.

The Act does not authorize the amalgamation or unified management of the two railways.

Section 2.—Statistics of Steam Railways.

The steam railways of the world may be said to have commenced their operations with the opening of the Stockton and Darlington Railway in England on Sept. 26, 1825. Between then and 1931, the mileage of the steam railways of the world had increased to an estimated total of 781,458 miles, of which figure 294,601 miles were State railways. Of the total, nearly one-third, or 253,286 miles is in the United States. Canada is second with 41,967 miles (exclusive of 341 miles of Canadian railways in the United States) and British India third with 38,736 miles. Germany has 36,344 miles, France 33,208 miles, Russia in Europe 36,701 miles, Russia in Asia 11,061 miles, Australia 28,883 miles, Great Britain and Ireland 24,360 miles, Argentina 23,430 miles, Brazil 19,560 miles and Mexico 16,406 miles.[1] Canada has an average of 247 persons per mile of her railway lines.

The mileage of steam railways in operation in Canada is given by years for each year from 1850 to 1931 in Table **1**, showing the first great period of construction in the 1850's, when the mileage grew from 66 to 2,065, the lull in the

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[1] From Slason Thompson's Railway Statistics of the United States of America, 1931, p. 32, with revisions for Canada and United States.

1860's, the second great period of construction in the 1870's and 1880's, the lull in the 1890's, the third great period of construction between 1900 and 1917 and the subsequent falling-off in the rate of increase.

1.—Record of Steam Railway Mileage as at June 30, 1835-1919, and Dec. 31, 1919-31.

Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.
	No.		No.		No.		No.		No.		No.
1835.....	–	1861....	2,146	1875....	4,804	1889....	12,628	1903....	18,988	1917....	38,369
1836–46..	16	1862....	2,189	1876....	5,218	1890....	13,151	1904....	19,431	1918....	38,252
1847–49..	54	1863....	2,189	1877....	5,782	1891....	13,838	1905....	20,487	1919....	38,330
1850.....	66	1864....	2,189	1878....	6,226	1892....	14,564	1906....	21,423	1919....	38,496
1851.....	159	1865....	2,240	1879....	6,858	1893....	15,005	1907....	22,446	1920....	38,806
1852.....	205	1866....	2,278	1880....	7,194	1894....	15,627	1908....	22,966	1921....	39,192
1853.....	506	1867....	2,278	1881....	7,331	1895....	15,977	1909....	24,104	1922....	39,360
1854.....	764	1868....	2,270	1882....	8,697	1896....	16,270	1910....	24,731	1923....	39,665
1855.....	877	1869....	2,524	1883....	9,577	1897....	16,550	1911....	25,400	1924....	40,061
1856.....	1,414	1870....	2,617	1884....	10,273	1898....	16,870	1912....	26,840	1925....	40,352
1857.....	1,444	1871....	2,695	1885....	10,773	1899....	17,250	1913....	29,304	1926....	40,352
1858.....	1,863	1872....	2,899	1886....	11,793	1900....	17,657	1914....	30,795	1927....	40,572
1859.....	1,994	1873....	3,832	1887....	12,184	1901....	18,140	1915....	34,882	1928....	41,024
1860.....	2,065	1874....	4,331	1888....	12,163	1902....	18,714	1916....	36,985	1929....	41,409
										1930....	42,075
										1931....	42,308

The operated mileage in the different provinces is given for recent years in Table 2. Construction was most active in Saskatchewan and Alberta during the period covered, as will be seen from the increased mileage recorded in these provinces.

2.—Operated Steam Railway Mileage, by Provinces, Dec. 31, 1923-31.

Province and Type of Track.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
Single Track—									
Prince Edward Island...	277	276	276	276	276	276	276	286	286
Nova Scotia..........	1,447	1,427	1,427	1,426	1,424	1,421	1,420	1,418	1,418
New Brunswick........	1,947	1,942	1,935	1,935	1,935	1,935	1,934	1,934	1,934
Quebec...............	4,919	4,882	4,797	4,767	4,859	4,910	4,891	4,891	4,926
Ontario..............	10,957	10,947	10,908	10,870	10,834	10,866	10,872	10,938	10,905
Manitoba.............	4,521	4,520	4,540	4,296	4,293	4,293	4,294	4,420	4,419
Saskatchewan.........	6,518	6,942	7,056	7,268	7,358	7,551	7,761	8,166	8,268
Alberta..............	4,784	4,818	4,965	5,048	5,139	5,307	5,543	5,607	5,656
British Columbia.......	3,966	3,976	4,117	4,072	4,060	4,071	4,024	4,021	4,097
Yukon................	58	58	58	58	58	58	58	58	58
In United States.......	273	273	273	336	336	336	336	336	341
Totals, Single Track.....	**39,665**	**40,061**	**40,352**	**40,352**	**40,572**	**41,024**	**41,409**	**42,075**	**42,308**
Second track............	2,591	2,619	2,614	2,620	2,647	2,639	2,659	2,690	2,690
Industrial track..........	–	–	1,555	1,591	1,611	1,662	1,607	1,623	1,606
Yard track and sidings....	9,680	10,012	9,579	9,716	9,887	10,130	10,193	10,254	10,304
Grand Totals, All Tracks	**51,936**	**52,692**	**54,100**	**54,279**	**54,717**	**55,455**	**55,868**	**56,642**	**56,908**

Capital Liability.—The capital liability of the steam railways of Canada is shown in Table **3** for the years 1901 to 1931. The great increase after 1922 is due to the inclusion of all Government loans to railways and investment in road and equipment of Government railways as part of the capital liability of the railways. Statistics of individual lines are given in Table **4**.

3.—Capital Liability of Steam Railways, June 30, 1901-19, and Dec. 31, 1919-31.

NOTE.—Corresponding figures for each year from 1876 to 1900 inclusive were given on p. 649 of the 1927-28 Year Book.

Year.	Stocks.	Funded Debt.	Total.	Year.	Stocks.	Funded. Debt.	Total.
	$	$	$		$	$	$
1901....	424,414,314	391,696,523	816,110,837	1917...	1,089,114,875	896,005,116	1,985,119,991
1902....	460,401,863	404,806,847	865,208,710	1918...	1,093,885,495	905,994,999	1,999,880,494
1903....	483,770,312	424,100,762	907,871,074	1919...	1,100,301,195	914,823,515	2,015,124,710
1904....	492,752,530	449,114,035	941,866,565	1919...	1,104,409,122	931,756,484	2,036,165,606
1905....	526,353,951	465,543,967	991,897,918	1920...	1,323,705,962	846,324,166	2,170,030,128
1906....	561,655,395	504,226,234	1,065,881,629	1921...	1,372,545,165	792,142,471	2,164,687,636
1907....	588,568,591	583,369,217	1,171,937,808	1922...	1,415,623,322	743,653,809	2,159,277,131
1908....	607,891,349	631,869,664	1,239,761,013	1923...	1,385,080,426	1,879,593,612[1]	3,264,674,038[1]
1909....	647,534,647	660,946,769	1,308,481,416	1924...	1,401,263,285	2,012,602,328[1]	3,413,865,613[1]
1910....	687,557,387	722,740,300	1,410,297,687	1925...	1,378,706,860	2,092,374,049[1]	3,471,080,909[1]
1911....	749,207,687	779,481,514	1,528,689,201	1926[2]..	1,361,758,426	2,144,999,621[1]	3,506,758,047[1]
1912....	770,459,351	818,478,175	1,588,937,526	1927[2]..	1,330,215,248	2,252,256,367[1]	3,582,471,615[1]
1913....	918,573,740	613,256,952	1,531,830,692	1928[2]..	1,357,017,703	2,306,554,996[1]	3,663,572,699[1]
1914....	1,026,418,123	782,402,638	1,808,820,761	1929[2]..	1,405,622,070	2,497,054,907[1]	3,902,676,977[1]
1915....	1,024,085,983	851,724,905	1,875,810,888	1930[2]..	1,431,324,003	2,595,145,308[1]	4,026,469,311[1]
1916....	1,024,264,325	868,861,449	1,893,125,774	1931[2]..	1,438,050,759	2,793,971,329[1]	4,232,022,088[1]

[1] Includes all Government loans to railways and investment in road and equipment of Dominion and provincial railways. [2] Does not include Canadian railway capital owned by Canadian railways.

4.—Mileage, Capital Liability, Earnings and Operating Expenses of Individual Steam Railways for the calendar year 1931.

Railway.	Single Track Mileage.	Capital Liability.	Gross Earnings from Operation.	Operating Expenses.
	miles.	$	$	$
Algoma Central Terminals, Ltd.	–	3,095,628	–	–
Algoma Central and Hudson Bay	323·75	15,590,850	1,242,199	1,301,717
Algoma Eastern	–	–	309,070	147,527
Alma and Jonquière	10·60	629,800	63,157	51,976
Brandon, Sask. and Hudson Bay	84·72	2,602,000	37,995	98,012
British Yukon	90·32	4,978,879	149,101	115,935
Canada and Gulf Terminal	38·10	1,740,000	82,190	79,773
Canada Southern	381·04	44,365,000	14,153,592	10,396,312
Canadian National	18,714·07[1]	–	148,444,022	142,048,145
" " Eastern Lines	3,342·37[1]	–	23,231,424	29,624,987
" " Totals	22,056·44[1]	2,917,714,352[2]	171,675,446	171,673,132
Canadian Pacific	15,752·00	1,163,235,318[2]	141,999,360	112,692,928
Central Vermont Railway, Inc	25·33[1]	–	182,284	202,473
Crow's Nest Southern	53·32	4,295,000	27,032	61,064
Cumberland Railway and Coal Co	31·29	1,348,962	171,181	128,738
Detroit River Tunnel Co	3·26	21,000,000	–	–
Dominion Atlantic	304·54	–	1,599,153	1,661,174
Eastern British Columbia	13·04	420,000	94,953	80,887
Esquimalt and Nanaimo	211·00	–	898,025	644,857
Essex Terminal	21·44	1,120,000	211,788	146,260
Fredericton and Grand Lake Coal and Ry. Co.	–	–	57,671	37,274
Greater Winnipeg Water District	92·00	1,809,064	89,678	100,425
International Bridge and Terminal Co.	1·06	300,000	–	–
Maine Central	5·10	101,707	14,710	14,296
Maritime Coal, Railway and Power Co.	16·40	2,351,000	108,526	76,850

For footnotes see end of table, p. 653.

4.—Mileage, Capital Liability, Earnings and Operating Expenses of Individual Steam Railways for the calendar year 1931—concluded.

Railway.	Single Track Mileage.	Capital Liability.	Gross Earnings from Operation.	Operating Expenses.
	miles.	$	$	$
Massawippi Valley	[4]	800,000	–	–
Midland Railway of Manitoba	75·76	4,800,000	245,975	330,117
Montreal and Atlantic	184·60	–	1,296,661	1,356,029
Morrissey, Fernie and Michel	5·37	1,263,000	62,921	72,800
Napierville Junction	43·04	1,200,000	499,908	326,264
Nelson and Fort Sheppard	60·79	2,846,800	40,186	75,782
New Brunswick Coal and Railway Co	–	–	27,775	35,405
Nipissing Central[3]	59·74	–	223,140	194,469
Northern Alberta	927·62	29,195,000	1,863,017	1,503,811
Ottawa and New York	58·77	2,100,000	171,134	264,580
Pacific Great Eastern	347·80	69,634,934	423,145	488,925
Père Marquette (including L.E.D.R.)	336·73	11,122,026	3,631,517	2,386,272
Quebec Central	364·84	–	1,727,132	1,730,073
Quebec Railway, Light and Power Co	25·55	5,265,671	419,788	397,647
Roberval-Saguenay	44·34	3,330,000	188,371	183,386
St. Lawrence and Adirondack	60·26	2,155,567	759,967	677,708
Sydney and Louisburg	73·90	4,890,611	1,121,054	858,167
Temiscouata	113·00	3,856,336	197,155	203,514
Temiskaming and Northern Ontario[3]	442·30	41,882,935	4,945,795	3,526,700
Thousand Islands	4·51	60,000	41,352	40,019
Toronto, Hamilton and Buffalo	111·03	10,695,000	2,294,759	1,784,810
Van Buren Bridge Co	0·36	500,000	–	–
Vancouver, Victoria and Eastern	241·42	23,500,000	388,213	438,215
Wabash (in Canada)	245·40	–	4,813,306	4,439,285
Totals, (including trackage rights duplications)	**43,341·88**	**4,405,795,440**[5]	**358,549,382**	**321,025,588**
Canadian National (Can. and U.S.)	23,880·61	–	200,505,162	199,312,995

[1] Canadian lines only. [2] Including capital of leased lines. [3] Constructed and operated by Ontario Government Railway Commission. [4] Included with Quebec Central. [5] Includes $173,773,352 Canadian railway capital owned by Canadian railways.

Capital Investment.—The capital investment in road and equipment of Canadian steam railways is shown in Table **5** for the calendar years 1926-31. The table gives the investment in new lines and in additions and betterments during the year, together with the cumulative total of such investments as at the end of each year. During 1931, $22,350,280 was invested in new lines and $42,804,071 in additions and betterments, while up to Dec. 31, 1931, a total of $3,464,388,610 had been invested in road and equipment of Canadian steam railways. When comparison is made with the figures of Table **3**, it is seen that the capital liability of the steam railways was considerably greater than the actual investment in physical property by the railways at the same date. This discrepancy is largely accounted for by the fact that the total of capital liabilities as shown in Table **3** includes loans and advances from the Government to cover deficits of the Canadian National Railways and unpaid accrued interest on such loans which, up to Dec. 31, 1931, amounted to $354,173,113 as shown in Table **22** and between 1919 and 1922 had amounted to about $264,000,000. A further factor in the discrepancy is that some of the outstanding railway stocks represent little actual investment in physical property.

5.—Capital Invested in Road and Equipment of Canadian Steam Railways, calendar years 1926-31.

Investment.	1926.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$	$
New Lines—						
Road	10,030,081	14,488,059	30,003,540	37,210,328	24,397,606	20,761,545
Equipment	129,645	448,649	351,447	31,125	31,167	632
General	277,356	2,807,259	488,806	869,773	536,602	1,588,103
Totals	10,437,082	17,743,967	30,843,793	38,111,226	24,965,375	22,350,280
Additions and Betterments—						
Road	19,515,536	32,188,136	33,682,796	44,445,646	40,885,501	21,704,352
Equipment	2,121,625	20,081,275	11,432,446	59,240,026	32,839,021	19,113,108
General	2,387,982	138,644	2,659,759	3,210,802	3,380,533	1,916,857
Undistributed	1,089,943	Cr. 74,948	Cr. 75,020	30,211	Cr. 48,662	69,754
Totals	25,115,086	52,333,107	47,699,981	106,926,685	77,056,393	42,804,071
Undistributed	Cr. 20,649,071[1]	1,436,902	Cr. 12,454,178[2]	Cr. 8,878,496[3]	Cr. 15,223,021[4]	Cr. 8,597,547[5]
Totals, Investments, as at Dec. 31	**3,047,270,072**	**3,118,784,048**	**3,184,873,644**	**3,321,033,059**	**3,407,831,806**	**3,464,388,610**

[1] Includes a credit of $14,944,515 on account of Hudson Bay Railway which was not operated but was returned to the Dominion Government for completion.

[2] Includes a credit of $13,477,505 on account of Canadian National property transferred to Harbour Commissions of Halifax and Saint John.

[3] Includes difference between purchase price of Atlantic, Quebec and Western; Kent Northern; Quebec, Montreal and Southern; and Quebec Oriental Railways and investment reported in 1928—a credit of $7,198,024; difference between valuation of Northern Alberta Railways and investment of Alberta and Great Waterways; Central Canada; Edmonton, Dunvegan and British Columbia; and Pembina Valley Railways as at June 30, 1929—a credit of $5,639,429; a credit of $1,869,859 for the Hereford Railway which ceased operation; and additions and betterments to separately operated properties and other undistributed items amounting to a debit of $5,828,816.

[4] Credit of $18,180,692 for Canadian Northern and Grand Trunk Pacific rails lifted during the War for use in France and other lines dismantled after consolidation of the Canadian National system.

[5] Includes a credit of $6,928,410 due to balance sheet transfers, and a credit of $1,359,261 for additions and betterments to separately operated properties of Canadian National Railways and miscellaneous credits amounting to $309,876.

Summary of Traffic Statistics.—A summary of freight and passenger traffic statistics and of the ratio of operating expenses to gross earnings, continuing a series which has been compiled since 1875, will be found for the years 1911 to 1931 in Table **6**. This table has, however, the defect that its figures of passengers and freight carried are not comparable throughout but have been reduced as a result of the consolidation of railways. Better tests of the real volume of passenger and freight traffic are supplied in Table **9** of this chapter under the headings "Passengers carried one mile" and "Freight carried one mile". These records, commencing in 1915, show that the maximum volume of passenger traffic was reached in the calendar year 1919 and the maximum volume of freight traffic in 1928. Both freight and passenger traffic, especially the latter, have in recent years been affected by the increase in the use of motor vehicles. This traffic decrease has been much aggravated since 1929 by the general decline in commercial activity.

The statistics of gross earnings and operating expenses illustrate the difficulties confronting our railways in recent years. Before the War it was generally held that, on account of the enormous initial investment required in roadbed and equipment, a railway's operating expenses should not exceed about two-thirds or 70 p.c. of its gross earnings, the remainder being required to meet interest on capital invested, whether represented by stocks or bonds, as well as to provide for necessary improvements. The ratio of operating expenses to gross earnings is called the operating ratio, and in 1913 the Canadian operating ratio was 70·90 p.c. The new conditions of the war period, especially the higher cost of labour and of fuel, increased the operating ratio, in spite of advances in freight and passenger rates, until in 1920 it reached 97·18 p.c. For 1928 there was a decline to a ratio of 78·53 p.c. which rose to 83·86 in 1930 and 89·53 in 1931. Although operating expenses for 1931 were lower than in 1930 on account of the decreases in both freight and passenger traffic, the gross revenues showed a much greater decline, reducing the net operating revenues by $35,984,445 and increasing the operating ratio.

In Table **7** will be found an analysis of the distribution of the operating expenses of steam railways for the latest four years. The earnings and operating expenses per mile of line and per train-mile are analysed in Table **8**.

6.—Summary of Steam Railway Statistics of Freight and Passenger Traffic, and Ratio of Expenses to Earnings, years ended June 30, 1911-19, and calendar years 1919-31.

NOTE—These statistics were published for the years 1875-1910 on p. 434 of the 1916-17 Year Book, and for 1901-10 on p. 591 of the 1926 Year Book.

Year.	Miles in Operation.	Total Train-Miles.	Passengers Carried.[1]	Freight Carried.[1]	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.
	No.	No.	No	tons.	$	$	p.c.
1911	25,400	89,716,533	37,097,718	79,884,282	188,733,494	131,034,785	69·43
1912	26,727	100,930,271	41,124,181	89,444,331	219,403,753	150,726,540	68·70
1913	29,304	113,437,208	46,185,968	106,992,710	256,702,703	182,011,690	70·90
1914	30,795	107,895,272	46,702,280	101,393,989	243,083,539	178,975,259	73·63
1915	35,582	93,218,479	46,322,035	87,204,838	199,843,072	147,731,099	73·92
1916	37,434	111,075,890	43,503,459	100,659,088	261,888,654	180,542,259	68·94
1917	38,604	115,797,100	48,106,530	121,916,272	310,771,479	222,890,637	71·72
1918	38,484	109,857,560	44,948,638	127,543,687	330,220,150	273,955,436	82·96
1919	38,501	103,832,835	43,754,194	116,699,572	382,976,901	341,866,509	89·27
1919 (Dec. 31)	38,663	107,053,735	47,940,456	111,487,780	408,598,361	376,789,093	92·26
1920 (")	38,976	117,384,819	51,318,422	127,429,154	492,101,104	478,248,154	97·18
1921 (")	39,363	104,652,167	46,793,251	103,131,132	458,008,891	422,581,205	92·25
1922 (")	39,360	107,625,144	44,383,620	108,530,518	440,687,128	393,927,406	89·39
1923 (")	39,665	113,907,613	44,834,337	118,289,604	478,338,047	413,862,818	86·52
1924 (")	40,061	110,032,845	42,921,809	106,429,355	445,923,877	382,483,908	85·77
1925 (")	40,352	109,289,865	41,458,084	109,850,925	455,297,288	372,149,656	81·70
1926 (")	40,352	113,538,876	42,686,166	122,476,822	493,599,754	389,503,452	78·91
1927 (")	40,572	116,895,751	41,840,550	125,967,439	499,064,207	407,646,280	81·68
1928 (")	41,024	125,034,253	40 592,792	141,230,026	563,732,260	442,701,270	78·53
1929 (")	41,409	117,645,670	39,070,843	137,855,151	534,106,045	433,077,113	81·08
1930 (")	42,075	107,620,076	34,698,767	115,229,511	454,231,650	380,723,411	83·86
1931 (")	42,308	93,443,731	26,396,812	85,993,206	358,549,382	321,025,588	89·53

[1] Duplications included. See also Table **9**.

7.—Distribution of Operating Expenses of Steam Railways, calendar years 1928-31.

Item of Expenditure.	1928.		1929.		1930.		1931.	
	$	p.c.	$	p.c.	$	p.c.	$	p.c.
Way and structures	97,763,472	22·08	94,021,972	21·71	78,035,587	20·50	66,109,521	20·59
Equipment	101,945,151	23·02	100,133,913	23·12	82,123,281	21·57	65,132,979	20·29
Traffic expenses	17,995,239	4·07	18,431,366	4·26	18,942,728	4·97	17,559,744	5·47
Transportation	208,049,857	47·00	202,944,180	46·86	183,813,325	48·28	156,468,783	48·74
General and misc. expenses	16,947,551	3·83	17,545,682	4·05	17,808,490	4·68	15,754,561	4·91
Totals	**442,701,270**	**100·00**	**433,077,113**	**100·00**	**380,723,411**	**100·00**	**321,025,588**	**100·00**

8.—Earnings and Operating Expenses of Steam Railways per Mile of Line and per Train Mile, for the years ended June 30, 1915-19, and the calendar years 1919-31.

Year.	Per Mile of Line.			Per Train Mile.	
	Gross Earnings.	Operating Expenses.	Net Earnings.	Gross Earnings.	Operating Expenses.
	$	$	$	$	$
1915 (June 30)	5,616	4,152	1,464	2·144	1·585
1916 (")	6,943	4,823	2,120	2·358	1·623
1917 (")	8,051	5,774	2,277	2·683	1·925
1918 (")	8,581	7,119	1,462	3·006	2·494
1919 (")	9,947	8,879	1,068	3·683	3·292
1919 (Dec. 31)	10,568	9,745	923	3·817	3·520
1920 (")	12,626	12,270	356	4·192	4·074
1921 (")	11,636	10,735	901	4·376	4·038
1922 (")	11,196	10,008	1,188	4·095	3·660
1923 (")	12,098	10,434	1,664	4·199	3·630
1924 (")	11,233	9,548	1,685	4·053	3·473
1925 (")	11,383	9,222	2,161	4·166	3·402
1926 (")	12,278	9,653	2,625	4·347	3·431
1927 (")	12,350	10,047	2,303	4·269	3·487
1928 (")	13,840	10,791	3,049	4·509	3·541
1929 (")	13,068	10,596	2,472	4·540	3·681
1930 (")	10,897	9,133	1,747	4·221	3·538
1931 (")	8,502	7,612	890	3·837	3·435

A summary analysis of passenger and freight traffic statistics for recent years is given in Table 9, showing among other things a decline in average receipts per passenger per mile from 3·04 cents in 1921 to 2·72 cents in 1931, and a decline in the average number of passengers per train from 70 in 1919 and 64 in 1920 to 39 in 1931. Similarly, freight traffic statistics show a reduction in freight receipts per ton per mile from 1·200 cents in 1921 to 1·013 cents in 1931. The average haul for freight has been revised to show the average for all railways instead of for each railway, thereby eliminating the effects of consolidations of railways and of interchanging freight between Canadian railways. The passenger traffic has shown the effects of the competition of motor vehicles, both public and private, which in 1915, numbered only 89,944, while in 1931 they numbered 1,206,836. The average revenue per passenger increased in 1918 and 1919 with increases in rates, but the increases between 1924 and 1930 have been largely due to decreases in the short haul traffic. The increases in freight train loading and train revenues have been due to the use of larger and more powerful locomotives.

9.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, for the years ended June 30, 1915-19, and the calendar years 1919-31.

PASSENGERS.

Year.	Passengers Carried.	Passengers Carried one Mile.	Passengers Carried one Mile per Mile of Line.	Average Receipts per Passenger Mile.
	No.	No.	No.	cents.
1915 (June 30)	46,322,035	2,483,708,745	69,802	2·02
1916 (")	43,503,459	2,727,122,648	72,611	1·95
1917 (")	48,106,530	3,150,127,428	79,829	1·95
1918 (")	44,948,638	3,161,082,402	82,140	2·12
1919 (")	43,754,194	3,074,664,369	79,859	2·56
1919 (Dec. 31)	47,940,456	3,658,492,716	94,625	2·63
1920 (")	51,318,422	3,522,494,856	90,376	2·92
1921 (")	46,793,251	2,960,583,955	75,219	3·04
1922 (")	44,383,620	2,814,113,531	71,497	2·82
1923 (")	44,834,337	3,076,341,444	77,805	2·76
1924 (")	42,921,809	2,872,333,579	72,355	2·79
1925 (")	41,458,084	2,910,760,047	72,771	2·69
1926 (")	42,686,166	2,998,952,309	74,595	2·71
1927 (")	41,840,550	3,051,784,039	75,522	2·69
1928 (")	40,592,792	3,140,860,693	77,110	2·67
1929 (")	39,070,893	2,897,214,817	70,883	2·77
1930 (")	34,698,767	2,422,874,877	58,123	2·76
1931 (")	26,396,812	1,748,210,593	41,452	2·72

9.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, for the years ended June 30, 1915-19, and the calendar years 1919-31—concluded.

PASSENGERS—concluded.

Year.	Average Receipts per Passenger.	Average Passenger Journey.	Average Number of Passengers per Train.	Passenger Train Revenue per Passenger Train Mile.
	$	miles.	No.	$
1915 (June 30)	1·08	54	50	1·02
1916 (")	1·08	55	53	1·04
1917 (")	1·14	59	59	1·16
1918 (")	1·49	70	64	1·71
1919 (")	1·80	70	63	2·01
1919 (Dec. 31)	2·01	76	70	2·26
1920 (")	2·00	68	64	2·36
1921 (")	1·92	63	57	2·30
1922 (")	1·79	63	55	2·10
1923 (")	1·90	69	64	2·51
1924 (")	1·87	67	59	2·34
1925 (")	1·89	70	60	2·33
1926 (")	1·90	70	61	2·41
1927 (")	1·96	73	61	2·38
1928 (")	2·06	77	61	2·38
1929 (")	2·06	74	56	2·33
1930 (")	1·92	70	48	2·02
1931 (")	1·79	66	39	1·68

FREIGHT.

Year.	Freight Carried.[1]	Freight Carried one Mile.	Freight Carried one Mile per Mile of Line.	Freight Receipts per Ton per Mile.
	tons.	tons.	tons.	cents.
1915 (June 30)	71,498,170	17,661,309,723	496,355	0·751
1916 (")	89,237,156	28,195,364,264	753,202	0·653
1917 (")	98,464,694	31,186,707,851	807,948	0·690
1918 (")	102,425,410	31,029,072,279	806,285	0·736
1919 (")	95,202,121	27,724,397,202	720,096	0·962
1919 (Dec. 31)	91,349,595	26,950,598,322	697,064	1·003
1920 (")	100,050,046	31,894,411,479	818,309	1·071
1921 (")	83,730,829	26,621,630,554	676,311	1·200
1922 (")	87,309,036	30,367,885,883	771,542	1·039
1923 (")	102,258,933	34,067,658,527	861,622	0·987
1924 (")	91,599,639	30,513,819,106	768,649	1·019
1925 (")	94,624,599	31,965,204,683	799,150	1·012
1926 (")	105,221,906	34,153,466,033	849,525	1·043
1927 (")	106,011,355	34,901,652,515	863,710	1·029
1928 (")	118,652,969	41,610,660,776	1,021,572	0·994
1929 (")	115,187,028	35,025,895,433	856,945	1·099
1930 (")	96,194,017	29,604,545,125	710,197	1·090
1931 (")	74,129,694	25,707,373,092	609,555	1·013

Year.	Receipts per Ton Hauled.	Average Length of Freight Haul.	Average Train Load in Net Tons.	Average Load per Loaded Car Mile.	Revenue per Freight Train Mile.
	$	miles.	tons.	tons.	$
1915 (June 30)	1·52	247	344	18·43	2·28
1916 (")	1·68	316	411	20·91	2·69
1917 (")	1·77	317	436	22·24	3·01
1918 (")	1·79	303	457	23·10	3·36
1919 (")	2·29	291	442	23·46	4·26
1919 (Dec. 31)	2·43	295	434	22·21	4·36
1920 (")	2·68	319	457	23·05	4·89
1921 (")	3·10	318	447	22·12	5·37
1922 (")	2·91	348	481	23·03	5·00
1923 (")	2·84	333	512	26·44	5·05
1924 (")	2·92	337	494	25·45	5·03
1925 (")	2·95	338	519	25·11	5·25
1926 (")	2·91	325	519	25·07	5·41
1927 (")	2·85	329	514	25·30	5·29
1928 (")	2·93	351	557	25·96	5·54
1929 (")	2·79	304	523	24·52	5·74
1930 (")	2·80	308	509	24·34	5·55
1931 (")	3·03	347	514	24·68	5·20

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[1] Duplications eliminated.

Railway Wages and Salaries.—The number of railway employees and the amount of their remuneration are naturally affected by the volume of traffic, which tends to rise in periods of active business conditions and fall in times of depression. The volume of traffic is also very directly affected by the size of the grain crops in the West. Thus it may be observed in Table **10** that the very favourable industrial and agricultural conditions of 1928 resulted in a considerable increase in the number of employees. The depression in 1929, 1930 and 1931 resulted in a reduction of $54,873,817 in the pay roll chargeable to operating expenses during these three years, although, owing to heavy construction work in 1929, the total pay roll as shown in Table **10** was slightly higher than in 1928.

Largely because of inflated monetary conditions, the amount of salaries and wages reached a peak in 1920, but, as will be seen from Table **10,** the wage bill increased from 1911 to 1920 to a much greater extent than the number of employees, *viz.,* by 289 p.c., while employees increased by only 31 p.c. By a revision in 1926, the pay roll includes both operating and construction or capital accounts and consequently the data are not directly comparable with data for previous years.

10.—Numbers of Steam Railway Employees, Totals and Averages of Salaries and Wages, and Ratios of the Latter to Gross Earnings and Operating Expenses, for years ended June 30, 1911-19, and for calendar years 1919-31.

Year.	Employees.	Salaries and Wages.	Average of Salaries and Wages.	Ratio to Gross Earnings.	Ratio to Operating Expenses.
	No.	$	$	p.c.	p.c.
1911 (June 30)	141,224	74,613,738	528	39·53	56·94
1912 (")	155,901	94,237,623	604	39·79	57·92
1913 (")	178,652	115,749,825	648	45·09	63·59
1914 (")	159,142	111,762,972	702	45·97	62·43
1915 (")	124,142	90,215,727	726	45·15	61·09
1916 (")	144,770	104,300,647	721	39·82	57·95
1917 (")	146,175	129,626,187	887	41·85	58·34
1918 (")	143,493	152,274,953	1,061	46·14	55·59
1919 (")	158,777	208,939,995	1,316	54·56	61·12
1919 (Dec. 31)	173,728	233,323,074	1,343	57·10	61·92
1920 (")	185,177	290,510,518	1,568	59·04	60·74
1921 (")	167,627	247,756,138	1,478	54·09	58·63
1922 (")	165,635	233,294,040	1,408	52·94	59·20
1923 (")	178,052	253,320,005	1,423	52·96	61·21
1924 (")	169,970	239,864,265	1,411	53·79	62·71
1925 (")	166,027	237,755,752	1,432	52·25	63·85
1926 (")	174,266[1]	253,412,424[1]	1,476[2]	45·74[3]	57·97[3]
1927 (")	176,338[1]	267,067,048[1]	1,539[2]	48·11[3]	58·90[3]
1928 (")	187,710[1]	287,775,316[1]	1,560[2]	46·95[3]	59·79[3]
1929 (")	187,846[1]	290,732,500[1]	1,580[2]	48·85[3]	60·24[3]
1930 (")	174,485[1]	268,347,374[1]	1,573[2]	55·38[3]	66·07[3]
1931 (")	154,569[1]	229,499,505[1]	1,514[2]	64·01[3]	71·49[3]

[1] Owing to changes in classification, the figures for 1926, 1927, 1928, 1929, 1930 and 1931 include 8,792, 8,360, 11,657, 13,396, 13,102 and 11,960 employees respectively, with salaries and wages of $9,075,602, $8,391,797, $13,218,742, $15,096,199, $14,663,500 and $13,611,637 respectively, engaged in outside operations and in classes not included prior to 1926. [2] Exclusive of classes specified in footnote 1 for 1926 and subsequent years. [3] The ratio percentages are for pay roll chargeable to operating expenses only for 1926 and subsequent years.

Rolling Stock.—Statistics of the rolling stock of the steam railways of Canada are given for the last seven years in Table **11.** The figures may be supplemented by the statement that between 1920 and 1931 the average capacity of box cars increased from 34·779 tons to 39·086 tons, of flat cars from 33·459 to 38·949 tons, and of all freight cars from 35·141 tons to 39·551 tons. The average tractive power of the locomotive in use in 1920 was 31,112 lb. and in 1931, 37,130 lb.

11.—Rolling Stock of Steam Railways, calendar years 1925-31.

Rolling Stock.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.	No.	No.
LOCOMOTIVES.							
Passenger	1,529	1,478	1,488	1,469	1,466	1,438	1,392
Freight	3,425	3,416	3,384	3,376	3,233	3,192	3,165
Switching	769	756	756	789	796	784	780
Electric	29	29	32	35	36	37	40
Totals	**5,752**	**5,679**	**5,660**	**5,669**	**5,531**	**5,451**	**5,377**
PASSENGER CARS.							
First class	1,960	1,968	1,968	1,978	1,999	1,980	1,975
Second class	426	409	406	400	386	372	364
Combination	430	398	545	546	512	492	490
Immigrant	704	668	668	738	730	703	644
Dining	198	198	207	204	218	218	264
Parlour	249	255	262	288	313	331	310
Sleeping	822	893	956	1,111[1]	1,172[1]	1,224[1]	1,235[1]
Baggage, express and postal	1,843	1,850	1,687	1,667	1,653	1,699	1,695
Motor cars	57	60	65	69	68	73	104
Other	150	149	158	183	199	254	530
Totals	**6,839**	**6,848**	**6,922**	**7,184**	**7,250**	**7,346**	**7,611**
FREIGHT CARS.							
Box	154,527	150,499	151,232	148,717	151,565	151,500	152,841
Flat	22,308	21,631	21,018	20,335	19,601	17,728	17,266
Stock	12,025	11,746	11,656	11,312	10,408	9,479	9,281
Coal	23,445	23,663	23,551	23,278	22,676	22,251	23,091
Tank	466	456	462	466	495	516	512
Refrigerator	6,286	6,616	6,802	6,950	7,579	8,151	8,464
Other	5,170	6,644	6,062	5,970	5,432	5,402	3,310
Totals	**224,227**	**221,255**	**220,783**	**217,028**	**217,756**	**215,027**	**214,765**

[1] Includes pullman cars.

Commodities Hauled.—In Table **12**, the duplications from two or more railways handling the same freight have been eliminated. The peak year was 1928 when agricultural products were particularly heavy. The 1931 statistics show a decrease of 22,064,323 tons, or 23 p.c. from the 1930 total and of 38 p.c. from 1928. Decreases in 1931 were general, only 10 commodities showing increases over 1930. Six of these were animal products.

12.—Commodities Hauled as Freight on Steam Railways during the calendar years 1927-31.

NOTE.—In this table duplications are eliminated, *i.e.*, the same freight handled by two or more railways is counted only once. In this respect these figures differ from those in the corresponding table in the 1926 and previous Year Books, and also from those of Table **6** in this chapter.

Group and Product.	1927.	1928.	1929.	1930.	1931.
	tons.	tons.	tons.	tons.	tons.
AGRICULTURAL PRODUCTS—					
Wheat	12,295,949	17,997,862	10,816,763	9,889,323	9,523,180
Corn	751,924	858,760	846,488	663,070	437,004
Oats	1,170,675	1,548,811	1,347,478	993,749	1,165,758
Barley	994,794	1,463,535	1,048,602	721,897	613,237
Rye	531,681	453,093	288,606	239,879	148,748
Flax	134,303	133,133	77,928	109,444	71,934
Other grain	102,601	92,598	115,865	95,842	90,974
Flour	2,359,657	2,374,012	2,220,102	1,822,770	1,724,298
Other milled products	1,884,778	1,919,015	2,004,804	1,725,598	1,590,965
Hay and straw	689,722	563,301	535,239	579,286	415,349
Cotton	149,221	142,236	169,831	133,167	102,568
Apples (fresh)	244,000	282,432	285,088	349,816	263,644
Other fruit (fresh)	531,811	540,217	527,642	470,303	448,683
Potatoes	717,737	699,658	751,215	753,080	594,342
Other fresh vegetables	298,401	348,290	345,656	323,726	274,190
Other agricultural	733,165	759,742	758,836	792,984	721,641
Totals, Agricultural Products	**23,590,419**	**30,176,695**	**22,140,143**	**19,663,934**	**18,186,515**

12.—Commodities Hauled as Freight on Steam Railways during the calendar years 1927-31—concluded.

Group and Products.	1927.	1928.	1929.	1930.	1931.
	tons.	tons.	tons.	tons.	tons.
ANIMAL PRODUCTS—					
Horses	92,914	102,628	124,172	91,729	68,323
Cattle and calves	666,250	622,104	658,791	466,936	457,808
Sheep	70,330	64,334	76,320	72,698	67,746
Hogs	348,388	310,827	296,473	233,993	240,651
Dressed meats (fresh)	477,790	453,061	460,807	499,408	487,295
Dressed meats (cured or salted)	272,790	278,614	267,629	176,205	131,325
Other packing-house products	248,602	284,653	284,392	210,210	216,071
Poultry	93,780	101,701	109,121	89,522	100,160
Eggs	168,598	151,299	146,968	155,442	157,909
Butter and cheese	277,691	262,759	249,206	241,064	229,526
Wool	58,533	63,166	59,094	52,518	54,396
Hides and leather	185,265	168,635	154,433	134,014	114,241
Other animal	104,625	107,890	111,292	96,377	102,480
Totals, Animal Products	**3,065,556**	**2,971,671**	**2,998,698**	**2,520,116**	**2,427,931**
MINERAL PRODUCTS—					
Anthracite coal	4,552,095	5,212,748	5,169,348	4,574,824	3,167,754
Bituminous coal	14,327,884	13,266,158	14,370,779	12,153,738	9,962,001
Lignite coal	2,958,916	3,214,005	3,145,782	2,833,973	2,155,799
Coke	1,230,318	1,549,428	1,719,081	1,447,005	1,189,739
Iron ore	512,578	608,692	688,384	421,546	45,229
Other ores and concentrates	3,278,901	3,752,965	4,702,860	3,659,231	1,297,619
Base bullion and matte	85,536	125,370	162,781	189,437	125,674
Clay, gravel, sand, stone (crushed)	7,193,841	7,836,974	9,072,573	7,692,562	5,256,641
Slate, dimension or block stone	346,519	390,665	401,540	350,159	261,304
Crude petroleum	641,644	806,202	939,509	878,738	546,267
Asphaltum	386,928	371,283	480,541	281,450	258,640
Salt	356,025	370,480	350,544	264,337	264,372
Other mineral	541,542	983,167	1,069,232	947,511	1,092,404
Totals, Mineral Products	**36,412,727**	**38,488,137**	**42,272,954**	**35,694,511**	**25,623,443**
FOREST PRODUCTS—					
Logs, posts, poles, cordwood	3,696,800	4,042,410	4,162,238	3,254,653	2,099,229
Ties	179,351	204,546	199,227	118,326	85,367
Pulpwood	4,821,837	5,090,938	3,951,674	3,941,747	2,098,824
Lumber, timber, box shooks, heading	6,606,332	6,639,247	6,404,264	4,507,359	3,276,337
Other forest	637,898	635,915	586,421	557,232	361,730
Totals, Forest Products	**15,942,218**	**16,613,056**	**15,303,824**	**12,379,317**	**7,921,487**
MANUFACTURES AND MISCELLANEOUS—					
Refined petroleum and its products	2,183,613	2,637,478	3,088,483	2,811,336	2,384,377
Sugar	560,558	535,744	535,477	411,917	282,276
Iron—pig and bloom	371,436	446,625	492,659	317,734	203,995
Rails and fastenings	158,969	260,334	253,890	178,781	136,827
Bar and sheet iron—structural iron and iron pipe	1,487,998	1,938,795	2,416,028	1,549,071	1,001,321
Castings, machinery and boilers	661,030	668,974	713,526	531,145	307,64
Cement	1,333,256	1,493,173	1,711,985	1,350,308	1,197,785
Brick and artificial stone	956,660	1,008,582	1,051,484	649,565	390,714
Lime and plaster	441,908	475,577	489,503	367,357	296,498
Sewer pipe and drain tile	95,216	124,888	125,915	88,016	79,553
Agricultural implements and vehicles other than autos	490,147	552,456	485,721	318,019	139,658
Automobiles and auto-trucks	1,746,285	2,416,009	2,599,309	1,666,866	1,117,514
Household goods	75,684	75,037	62,921	51,912	55,034
Furniture	110,717	114,560	128,661	86,904	64,779
Liquor and beverages	294,337	355,973	343,017	277,901	192,102
Fertilizers, all kinds	445,355	577,125	568,069	607,408	469,244
Paper, printed matter, books	2,315,206	2,640,459	2,986,674	2,586,915	2,292,384
Wood-pulp	1,477,852	1,430,533	1,338,847	1,018,626	786,949
Fish (fresh, cured, etc.)	114,993	113,075	110,393	96,448	76,833
Canned meats	11,634	8,889	9,027	8,403	5,672
Canned goods (all canned food products other than meat)	385,202	426,906	452,118	383,499	307,976
Other manufactures and miscellaneous	6,749,899	7,453,684	8,058,484	6,868,181	5,283,772
Merchandise	4,532,480	4,648,534	4,449,218	3,709,827	2,897,410
Totals, Manufactures and Misc.	**27,000,435**	**30,403,410**	**32,471,409**	**25,936,139**	**19,970,318**
Grand Totals	**106,011,355**	**118,652,969**	**115,187,028**	**96,194,017**	**74,129,694**

Government Aid to Private Railways.—In order that the private railways of Canada might be constructed in advance of settlement, as colonization roads or through thinly settled districts where little traffic was available, it was necessary for Dominion, Provincial and even municipal governments to extend some form of assistance. In our earlier history, when our governments had plenty of Crown land and little cash, the subsidies granted to railways frequently took the form of land grants, which had the advantage of giving the railway a direct interest in opening up the country, though they sometimes led to the railways holding large tracts of land idle for speculative purposes when intermixed Crown lands had been homesteaded, thus retarding the settlement of agricultural land. Table **13** shows the areas of the land granted as subsidies and for right of way, station grounds and townsite purposes to steam railway companies by the Dominion and Provincial Governments, with the names of the companies in the case of the Dominion Government. The total area granted up to Dec. 31, 1931, amounted to 47,400,714 acres.

As the country grew wealthier, the objections to the land grant method became more apparent, and aid was more frequently given in the form of a cash subsidy per mile of line, a loan, or a subscription to the shares of the railway. From 1851 up to Dec. 31, 1931, as shown analytically in Table **14,** the total value of such aid granted to steam railways in Canada, exclusive of the capital of government railways, amounted to $222,942,253. Of this sum, $176,693,510 was aid granted by the Dominion Government, $33,260,615 that granted by the Provincial Governments, and $12,988,128 that granted by municipalities. Table **15** records the details of the most recent type of assistance given to private railways, *viz.*, by the guaranteeing of their bonds or of the interest thereupon. These guarantees enabled the railways receiving them to borrow money at rates of interest considerably lower than would otherwise have had to be paid. The total amount outstanding on Dec. 31, 1931, was $847,616,637.

13.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments up to Dec. 31, 1931.

Item.	Bonus Grants.	Grants for Right of Way, Station Grounds and Townsite Purposes.	Total.
	acres.	acres.	acres.
GRANTED BY—			
Dominion	31,783,655	97,825	31,881,480
Nova Scotia	160,000	-	160,000
New Brunswick	1,788,392	-	1,788,392
Quebec	2,085,710	-	2,085,710[1]
Ontario	3,241,207	-	3,241,207
Saskatchewan	-	1,826	1,826
Alberta	-	256	256
British Columbia	8,233,410	8,433	8,241,843[2]
Totals	**47,292,374**	**108,340**	**47,400,714[1] [2]**

For footnotes see end of table, p. 662.

13.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments up to Dec. 31, 1931—concluded.

Item.	Bonus Grants.[3]	Grants for Right of Way, Station Grounds and Townsite Purposes.	Total.[4]
GRANTED TO—	acres.	acres.	acres.
Canadian National Lines—			
Canadian National	–	1,448	1,448
Canadian North Western	–	1,450	1,450
Canadian Northern (main line and branches)	3,422,528	13,206	3,435,734
Canadian Northern Alberta	–	1,582	1,582
Canadian Northern Manitoba	–	73	73
Canadian Northern Pacific	–	5,219	5,219
Canadian Northern Saskatchewan	–	30	30
Grand Trunk Pacific (main line)	–	12,960	12,960
Grand Trunk Pacific branches	–	1,943	1,943
Manitoba Northern	–	2,156	2,156
Manitoba and South Eastern	680,320	–	680,320
National Transcontinental	–	12	12
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.	1,625,344	1,900	1,627,244
Canadian Pacific Lines—			
Alberta Central	–	87	87
Alberta Railway and Irrigation Co.	1,101,712	1,998	1,103,710
Calgary and Edmonton	1,820,685	2,568	1,823,253
Canadian Pacific (main line)	18,206,986	30,959	18,237,945
Canadian Pacific branches	1,609,024	15,427	1,624,451
Columbia and Western	–	2	2
Great North West Central	320,000	6	320,006
Kaslo and Slocan	–	2	2
Kettle Valley	–	2,251	2,251
Kootenay Central	–	287	287
Lacombe and North Western	–	230	230
Manitoba North Western	1,501,376	1,347	1,502,723
Manitoba South Western Colonization	1,396,800	296	1,397,096
Nakusp and Slocan	–	18	18
Nicola, Kamloops and Similkameen	–	203	203
Saskatchewan and Western	98,880	17	98,897
Shuswap and Okanagan	–	242	242
Crow's Nest Southern	–	1	1
Greater Winnipeg Water District	–	2,352	2,352
Manitoba Rly. Co. (Nor. Pac. and Man. Rly.)	–	6	6
Northern Alberta Railways—			
Alberta and Great Waterways	–	2,542	2,542
Central Canada	–	708	708
Edmonton, Dunvegan and British Columbia—			
Main line	–	2,896	2,896
Grande Prairie branch	–	328	328
Northern Alberta	–	127	127
Pacific Great Eastern	–	1,324	1,324
Vancouver Power Co.	–	10	10
Vancouver, Victoria and Eastern Railway and Navigation Co.	–	72	72
Winnipeg River	–	55	55
Totals	**31,783,655**	**108,340**	**31,891,995**

[1] Not including convertible land grants made by the Government of Quebec. [2] Includes 4,065,076 acres re-purchased from B.C. Southern, and Columbia and Western Railways. [3] Grants by Dominion Government only. [4] Including only the bonus grants by the Dominion Government.

14.—Analysis of the Total Financial Aid Given to Steam Railways up to Dec. 31, 1931.

By the Dominion Government.		By Provincial Governments.	
	$		$
Cash subsidies	118,600,799	Cash subsidies	33,260,615
Loans	15,142,633	**Total Aid by Provinces**	**33,260,615**
Paid to Quebec Government	5,160,053	By Municipalities.	
Cost of lines handed over to C.P.R.	37,790,025	Cash subsidies	12,988,128
Total Aid by Dominion	**176,693,510**	**Total Aid by Municipalities**	**12,988,128**
		Grand Total	**222,942,253**

15.—Railway Bonds Guaranteed by Dominion and Provincial Governments, as at Dec. 31, 1931.

Government.	Outstanding Dec. 31, 1931.
	$
New Brunswick	917,000
Ontario	7,859,998
Manitoba	3,000,000
Saskatchewan	17,904,062
Alberta	18,394,428
British Columbia	45,186,001
Total Guaranteed by Provincial Governments	**93,261,489**
Dominion Government	754,355,148[1]
Grand Total	**847,616,637**

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[1] Does not include $216,207,142 perpetual debenture stock and guaranteed stock of the Grand Trunk Railway, on which interest and dividends are guaranteed by the Dominion Government, nor Government-guaranteed bonds held by the Government itself.

Railway Accidents.—The number of passengers, employees and others killed and injured in steam railway accidents is given in summary form from 1915 to 1931 in Table **16**, and in detailed analysis for 1929 to 1931 in Table **17**. Between 1915 and 1931 the number of persons killed in *train accidents* only, decreased by 120, or 32·8 p.c., and the number injured increased by 665, or 42·1 p.c., the increases at highway crossings, due largely to careless driving by motorists, being 18 killed and 209 injured. The number of persons injured in other accidents (trackmen, shopmen, etc.), increased from 1,583 in 1915 to 4,952 in 1931; the extent of the injuries cannot be compiled or compared, but it is probable that legislation in connection with workmen's compensation results in injuries to employees being much more completely reported in the later years.

16.—Number of Passengers, Employees and Others Killed and Injured on Steam Railways, years ended June 30, 1915-19, and calendar years 1919-31.

Note.—For the years 1888 to 1914, see Canada Year Book, 1922-23, page 635.

Year.	Passengers.		Employees.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1915	17	336	115	2,573	247	362	379	3,271
1916	20	309	174	4,332	274	337	468	4,978
1917	24	438	209	4,596	219	401	452	5,435
1918	32	344	178	5,352	200	393	410	6,089
1919	36	307	174	5,432	176	412	386	6,151
1919 (Dec. 31)	34	392	197	6,349	209	476	440	7,217
1920	29	481	167	7,719	197	480	393	8,680
1921	5	259	156	6,583	193	394	354	7,236
1922	11	369	122	8,361	208	517	341	9,247
1923	15	437	167	9,382	165	539	347	10,358
1924	19	432	127	8,862	216	514	362	9,808
1925	5	401	105	8,256	199	642	309	9,299
1926	20	446	127	10,622	312	638	459	11,706
1927	14	569	131	11,057	256	695	401	12,321
1928	15	389	140	12,626	352	790	507	13,805
1929	20	551	118	12,483	293	809	431	13,843
1930	15	548	103	9,678	345	837	463	11,063
1931	3	399	55	5,966	202	830	260	7,195

17.—Number of Persons Killed and Injured on Steam Railways in the calendar years 1929-31.

(A) IN ACCIDENTS RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

Item.	1929.		1930.		1931.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Description of Persons—						
Passengers	20	406	15	488	3	369
Employees	104	2,028	81	1,477	42	1,131
Trespassers	148	177	205	215	113	483
Non-trespassers	139	497	122	472	88	208
Postal clerks, expressmen, etc.	1	36	2	40	–	52
Totals	**412**	**3,144**	**425**	**2,692**	**246**	**2,243**
Description of Accident (Employees and Passengers only)—						
Coupling and uncoupling	2	165	6	102	2	78
Collisions	28	188	5	115	3	45
Derailments	17	268	12	223	1	130
Parting of trains	–	27	1	31	–	35
Locomotives or cars breaking down	1	19	2	21	–	6
Falling from trains or cars	23	288	20	187	5	88
Jumping on or off trains	11	360	7	339	3	292
Struck by trains, etc	37	157	40	138	15	78
Overhead obstruction	–	19	–	17	1	9
Other causes	5	943	3	792	15	739
Totals	**124**	**2,434**	**96**	**1,965**	**45**	**1,500**

(B) IN ACCIDENTS OTHER THAN THOSE RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

Description of Persons.	1929.		1930.		1931.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Stationmen	1	875	–	670	1	473
Shopmen	5	3,529	2	2,832	1	1,482
Trainmen and trackmen	7	3,947	14	3,043	8	2,341
Other employees	1	2,104	6	1,656	3	539
Passengers	–	145	–	60	–	30
Others	5	99	16	110	1	87
Totals	**19**	**10,699**	**38**	**8,371**	**14**	**4,952**

Section 3.—Origin and Growth of Government-Owned Railways.

Canadian Government Railways.—The Intercolonial Railway, built as a condition of Confederation and completed in 1876, and the Prince Edward Island Railway, opened in April, 1875, have since their construction been owned and operated by the Dominion Government. In 1903 the Dominion Government undertook the construction of the National Transcontinental Railway from Moncton, N.B., to Winnipeg, to be leased to the Grand Trunk Pacific Railway Company for a period of 50 years. However, as a result of the conditions arising from the Great War, the company was unable to take over the operation of the road when completed in 1915. The Government itself undertook its operation and was also obliged to lease the Lake Superior branch of the Grand Trunk Pacific Railway, which was isolated from the main line. A number of eastern branch lines have been acquired in recent years, including: the New Brunswick and Prince Edward Island Railway which forms the mainland connection of the Prince Edward

Island car ferry, the International Railway, the Moncton and Buctouche Railway, the Salisbury and Albert Railway, the St. Martin's Railway, the Elgin and Havelock Railway, the York and Carleton Railway, the Quebec and Saguenay Railway, the Caraquet and Gulf Shore Railway, the Lotbinière and Mégantic Railway and the Cape Breton Railway. The Saint John and Quebec, and Inverness Railways, which had been operated under lease, were purchased in 1929, together with the Kent Northern, the Atlantic, Quebec and Western, the Quebec Oriental and the Quebec, Montreal and Southern. The Hudson Bay Railway, which had 332·5 miles of steel rail at the end of 1920, was declared to be comprised in the Canadian Government Railways, and until 1926 was operated to a limited extent by the board of directors of the Canadian National Railways. In that year, as a result of the decision to complete the road, it was returned to the Department of Railways and Canals until completed. The eastern terminus was transferred from Nelson to Churchill, and the line rehabilitated and extended through to Churchill. Construction of wharves and a grain elevator was completed in time to allow two cargoes of wheat to be shipped in September, 1931, to Europe. To Mar. 31, 1932, the total cost of this railway was $31,194,693 and of terminal work at Churchill $11,606,121, exclusive of the expenditures of $6,274,218 on the terminal at Nelson, some of which was salvaged.[1]

Table **18**, from the Annual Report of the Department of Railways and Canals, shows Dominion Government investments in the Canadian Government Railways to Mar. 31, 1932.

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[1] These figures of total cost include deficits during operations and expenditures which formed part of cash loans to the Canadian National Railways and amounts chargeable to appropriations under collection of revenue in the case of the terminals, in addition to the expenditures by the Government on capital account as shown in Table **18**.

18.—Government Investments in Railways to Mar. 31, 1932.

(From the Annual Report of the Department of Railways and Canals.)

Account.	Expenditure, Fiscal Year 1932.	Total Expenditure.
	$	$
CANADIAN GOVERNMENT RAILWAYS—		
A. Roads entrusted to Canadian National Railways—		
Intercolonial Railway System—		
Canada Eastern Railway	–	819,000
Cape Breton Railway	–	3,860,679
Drummond County Railway	–	1,464,000
Eastern Extension Railway	–	1,324,043
Montreal and European Railway	–	333,943
Oxford and New Glasgow Railway	–	1,949,063
Intercolonial Railway	Cr. 2,505	122,995,073
Totals, Intercolonial Railway System	Cr. 2,505	132,745,801
New Brunswick and Prince Edward Island Railway	–	925,267
Prince Edward Island Railway	1,091,296	17,125,076
International Railway of New Brunswick	–	2,963,022
National Transcontinental Railway	Cr. 59,185	169,259,000
Moncton and Buctouche Railway	–	293,067
Salisbury and Albert Railway	–	437,648
St. Martin's Railway	–	302,046
Elgin and Havelock Railway	–	135,029
York and Carleton Railway	–	59,749
Quebec and Saguenay Railway	–	7,772,911
Caraquet and Gulf Shore Railway	–	711,767
Lotbinière and Mégantic Railway	–	360,008
Cape Breton Railway Extension	–	107,647
Canadian Government Railways (rolling stock)	Cr. 23,948	35,882,095
Canadian Government Railways (miscellaneous)	–	345
Quebec Bridge	–	21,706,664
Miscellaneous suspense	–	148
Totals, Roads Entrusted to C.N.R.	1,005,658	390,787,290

18—Government Investments in Railways to Mar. 31, 1932—concluded.
(From the Annual Report of the Department of Railways and Canals.)

Account.	Expenditure, Fiscal Year 1932.	Total Expenditure.
	$	$
CANADIAN GOVERNMENT RAILWAYS—concluded.		
B. Roads not entrusted to Canadian National Railways—		
Hudson Bay Railway	920,499	31,194,693
Hudson Bay Railway—Nelson Terminal	–	6,240,201
Hudson Bay Railway—Churchill Terminal	4,316,168	11,605,719
Totals, Roads not Entrusted to C.N.R.	5,265,506	49,040,613
Totals, Canadian Government Railways	**6,242,326**	**439,827,903**
OTHER RAILWAYS AND MISCELLANEOUS—		
Annapolis and Digby Railway	–	660,683
Central Canada Railway	–	175,000
North Railway	–	250,000
Governor General's cars	–	71,539
Miscellaneous expenditure	–	18,000
Yukon Works, Stikine-Teslin Railway (part of item under Schedule "H" of Public Accounts)	–	283,324
Canadian Pacific Railway	–	62,791,435
Grand Trunk Railway—Debenture Account	–	15,142,634
Grand Trunk Railway—Interest Account	–	10,457,458
Grand Trunk Railway—Special Account	–	7,302
Grand Trunk Railway—Preference Stock	–	121,740
Canadian Northern Railway—Purchase of Capital Stock	–	10,000,000
Loans to Railways—		
Canadian Northern Railway	–	255,408,804
Grand Trunk Railway	–	118,582,182
Grand Trunk Pacific Railway	–	116,006,599
Canadian National Railways	–	57,482,653
Loans to Railways—Purchase of equipment	–	56,926,001
Total, Other Railways and Miscellaneous	–	**704,385,354**
Grand Totals, Capital Expenditure	**6,242,326**	**1,144,213,257**

The Consolidation and Organization of the Canadian National System.[1]—In pursuance of an Act of 1917 (7-8 Geo. V, c. 24), the Government acquired the capital stock of the Canadian Northern Railways with a mileage of 9,566·5. The insolvency of the Grand Trunk Pacific led to the appointment of the Minister of Railways as receiver on Mar. 9, 1919, and in October, 1920, the road was transferred to the Canadian National Railways. The Grand Trunk Railway was acquired under c. 13 of the second session of 1919, which provided for arbitration as to the considerations to be given to its shareholders. This arbitration finally disposed of, steps were taken to consolidate the various railways under government operation and control. In October, 1922, the Grand Trunk Board and the Canadian Northern Board gave place to a single Canadian National Board, to which the former Canadian Government Railways were turned over for management and operation. The unification of the Grand Trunk and Canadian National Railways was provided for by Order in Council of Jan. 30, 1923, which also brought into effect the Act to incorporate the Canadian National Railway Company and respecting Canadian National Railways (c. 13, 1919). This was followed, on Feb. 5, 1923, by an Order in Council establishing the head office of the Canadian National Railways at Montreal, Que.

Operation of the Canadian National Railways.—The Canadian National system's steam mileage at Dec. 31, 1931, including lines in the United States but exclusive of the Northern Alberta (which is controlled jointly by the Canadian

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[1] For further details of the acquisition of the Canadian Northern, Grand Trunk Pacific and Grand Trunk Railways by the Dominion Government, see pp. 602-603 of the 1926 Year Book.

National and the Canadian Pacific Railways), was 20,538·24, which with the Eastern Lines' mileage of 3,342·37 made a total of 23,880·61. Including the Thousand Islands Railway, 4·51, and the Muskegon Railway and Navigation Co., 5·25, controlled but separately operated, the total steam mileage was 23,890·37. Including 122·8 miles of electric lines, the grand total was 24,013·17.

The Maritime Freight Rates Act (17 Geo. V, c. 44), effective July 1, 1927, ordered that the accounts of the Canadian National lines east of Lévis and Diamond Junction, Quebec, be kept separate from those of the remainder of the Canadian National system. These lines were designated the "Eastern Lines" of the Canadian National Railways. The Act ordered that specified freight rates on the Eastern Lines be reduced by 20 p.c. Other railways were allowed to make similar reductions in their freight rates in that territory and to bill on the Board of Railway Commissioners of Canada for the difference in freight receipts due to such reductions. The Government contributions to the deficits of the Eastern Lines due to these reductions are shown in Table **22.** The total paid to privately owned railways under the Act was $421,655, $828,893, $811,149, $861,195 and $669,673, respectively, for 1927-31.

For operation the Canadian National Railways system is divided into five divisions: the Atlantic division, including all lines east of Rivière du Loup and Monk, Quebec, 3,021 miles; the central division west from these stations to Port Arthur and Armstrong and south to Portland, Maine, 7,403 miles; the Western division, all lines west of Port Arthur and Armstrong including the line to Duluth, 11,419 miles; the Grand Trunk Western, all lines in Michigan, Indiana and Illinois, 1,023 miles; and the Central Vermont from Iberville, Quebec, to New London, Connecticut, 457 miles.

The Quebec Bridge across the St. Lawrence above Quebec city, with a main span of 1,800 ft., carrying a single track railway and accommodation for motor and pedestrian traffic, forms a connecting link in the Canadian National Railways system and is operated as a part of it.

Table **19** shows some of the more important train traffic statistics of Canadian National Railways operation for the years 1930 and 1931 (excluding the Eastern Lines).

19.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, for the calendar years 1930 and 1931.[2]

Item.	1930.[1]	1931.[1]
Train Mileage—		
Passenger trains	21,959,977	19,203,117
Freight trains	24,912,229	21,223,191
Mixed trains	2,555,900	2,625,083
Special trains	20,818	14,771
Unit cars	1,247,656	1,364,366
Totals, Train Miles[3]	50,696,580	44,430,528
Car mileage—		
Passenger—		
Coaches, parlour, sleeping and dining cars	109,390,722	91,571,007
Baggage, mail, express, etc	53,320,958	47,179,956
Totals, Passenger Train Car Miles[3]	162,711,680	138,750,963

See end of table, next page, for footnotes.

19.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, for the calendar years 1930 and 1931[2]—concluded.

Item.	1930.[1]	1931.[1]
Freight—		
Loaded freight car miles	702,084,408	591,646,601
Empty freight car miles	341,501,733	315,432,832
Caboose miles	26,885,234	23,177,705
Totals, Freight Train Car Miles[3]	1,070,471,375	930,257,138
Passenger Traffic—		
Passengers carried (earning revenue)	14,054,578	10,537,405
Passengers carried (earning revenue) one mile	1,011,915,258	724,398,245
Passenger train miles per mile of road	1,142	1,003
Average passenger journey—miles	72·00	68·75
Average amount received per passenger $	1·999	1·865
Average amount received per passenger mile $	0·0278	0·0271
Average number of passengers per train mile	42·79	34·54
Average number of passengers per car mile	9·98	8·50
Revenue from passengers per passenger car mile $	0·2772	0·2308
Total passenger train earnings per train mile $	1·92	1·63
Total passenger revenue per mile of road $	2,236·19	1,670·82
Freight Traffic—		
Tons of revenue freight carried	50,629,556	38,703,891
Tons of revenue freight carried one mile	15,192,210,516	13,186,328,551
Tons of non-revenue freight carried one mile	1,740,022,931	1,294,716,242
Total tons (all classes) freight carried one mile	16,932,233,447	14,481,044,793
Tons of revenue freight carried one mile per mile of road	743,691	639,941
Total tons (all classes) freight carried one mile per mile of road	829,341	703,099
Average number of tons revenue freight per train mile	558·97	559·54
Average number of tons (all classes) freight per train mile	623·35	614·77
Average number of tons (all classes) freight per loaded car mile	24·00	24·37
Average haul revenue freight—miles	300·07	339·11
Freight revenue per loaded car mile $	0·23409	0·22520
Freight revenue per train mile $	6·08	5·68
Freight revenue per mile of road $	8,087·70	6,498·60
Freight revenue per ton $	3·24523	3·44196
Freight revenue per ton mile $	0·01085	0·01010

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[1] Excludes Eastern Lines and electric lines.

[2] For detailed statistics of the operation and finances of the Canadian National Railways during 1931 see the annual report of the Department of Railways and Canals for the fiscal year ended Mar. 31, 1932, and Steam Railway Statistics, 1931, published by the Dominion Bureau of Statistics, also the annual report of the Canadian National Railways.

[3] Work service excluded.

Operating Finances of the Canadian National Railways.—In Table **20** "Canadian Lines" include those of the Canadian Northern system, the Grand Trunk Railway of Canada, the Grand Trunk Pacific and the Canadian Government Railways. The "United States Lines" include those lines known as the New England line, the Grand Trunk Western, the Duluth, Winnipeg and Pacific and the Central Vermont from Feb. 1, 1930. The Hudson Bay Railway was returned to the Government while under construction, and appropriations, etc., for this were not included with the 1926 and later data. The Maritime Freight Rates Act necessitated the segregation of the Eastern Lines which have been kept separate since July 1, 1927.

Gross revenues, operating expenses and net revenues shown in Table **20** include only those from steam railway and commercial telegraph operations, but the deficits are for the entire system, including the operating results of the Niagara, St. Catharines and Toronto Railway (electric) and other railways operated separately, hotels, commercial telegraphs, coastal steamships and all other outside operations.

Up to 1928 there was a marked improvement over the results of the first year after consolidation (1923), when the deficit, including profit and loss adjustments, was $54,634,322, but the light traffic in 1932 so reduced gross revenues that, with increased interest charges, the deficit increased to $101,335,074 in that year.

The figures of Table **20** are taken from the accounts of the railways as at Dec. 31, 1932. Adjustments have been made which result in minor changes in the items of interest and deficits for former years.

20.—Gross Revenues, Operating Expenses, Net Revenues, Interest on Funded Debt and Deficits of the Canadian National Railways,[1] for the calendar years 1923-32.

Year.	Railway Operating Revenues.[2]			Railway Operating Expenses.[2]			Net Operating Revenues.[2]		
	Canadian Lines.	United States Lines.	Total.	Canadian Lines.	United States Lines.	Total.	Canadian Lines.	United States Lines.	Total.
	$	$	$	$	$	$	$	$	$
1923	218,613,309	38,348,281	256,961,590	206,069,866	29,768,180	235,838,046	12,543,443	8,580,101	21,123,544
1924	205,232,981	34,363,689	239,596,670	192,738,522	28,883,527	221,622,049	12,494,459	5,480,162	17,974,621
1925	212,659,602	36,752,282	249,411,884	187,956,847	28,333,587	216,290,434	24,702,755	8,418,695	33,121,450
1926	230,342,249	40,639,974	270,982,223	194,029,900	29,531,362	223,561,262	36,312,349	11,108,612	47,420,961
1927	233,735,751	41,143,367	274,879,118	202,776,373	30,528,894	233,305,267	30,959,378	10,614,473	41,573,851
1928	260,418,924	44,172,344	304,591,268	217,780,174	31,951,522	249,731,696	42,638,750	12,220,822	54,859,572
1929	248,222,476	42,274,504	290,496,980	217,223,887	31,408,388	248,632,275	30,998,589	10,866,116	41,864,705
1930	213,446,581	36,922,417	250,368,998	196,502,058	31,785,965	228,288,023	16,944,523	5,136,452	22,080,975
1931	171,675,446	28,829,716	200,505,162	171,673,133	27,639,862	199,312,995	2,313	1,189,854	1,192,167
1932	139,948,317	21,155,277	161,103,594	134,300,983	20,907,178	155,208,161	5,647,334	248,099	5,895,433

Year.	Interest on Funded Debt.			Deficit.		Cumulative Deficits.[4]	
	On Public Debt.	On Dominion Government Loans.	Total.	Including Govt. Loan Interest.	Excluding Govt. Loan Interest.	Including Govt. Loan Interest.	Excluding Govt. Loan Interest.
	$	$	$	$	$	$	$
1923	35,041,380	30,157,944	65,199,324	54,634,323	24,476,379	54,634,323	24,476,379
1924	38,361,704	31,271,043	69,632,747	54,474,547	23,203,504	109,108,870	47,679,883
1925	40,438,235	31,450,382	71,888,617	41,651,270	10,200,888	150,760,140	57,880,771
1926	39,197,233[3]	32,090,454	71,287,687	23,199,441	Cr.8,891,013	173,959,581	48,989,758
1927	40,526,097	32,505,234	73,031,331	37,526,900	5,021,667	211,486,481	54,011,425
1928	41,810,880	32,507,337	74,318,217	33,314,828	807,491	244,801,309	54,818,916
1929	45,503,980	32,690,545	78,194,525	46,610,317	13,919,772	291,411,626	68,738,688
1930	51,316,121	32,693,875	84,009,996	73,733,692	41,039,816	365,145,318	109,778,504
1931	55,587,145	32,643,624	88,230,769	99,275,680	66,632,056	464,420,998	176,410,560
1932	56,965,279	35,525,540	92,490,819	101,335,074	65,809,534	565,756,072	242,220,094

[1] Includes Central Vermont Railway from Feb. 1, 1930.

[2] Revenues and expenses, 1923-27, adjusted to include commercial telegraph lines to be comparable with 1928-31.

[3] Interest at 4 p.c. on $34,927,098 G.T.P. debenture stock reduced under agreement to 2 p.c.

[4] The deficits shown are as per the accounts and include Government interest accounting adjustments of $11,505,416 and appropriation for insurance fund of $9,388,962, the actual cash deficit for the period being $221,325,716, as shown in Table **22**.

The Debt and Interest Charges of the Canadian National Railways.—Table **21**, which follows, analyses the increase in the debt and interest charges of the system, including both Canadian and United States lines. The table shows to whom the liabilities which have accumulated up to the end of 1932 and the new funds available each year are payable. To define clearly what is included under debt due to the Dominion Government in Table **21**, the appropriations for the Canadian Government Railways have been separated from the loans and advances to the remainder of the system. The Canadian Government Railways include the Intercolonial, National Transcontinental, Prince Edward Island and several other smaller railways in the Eastern Provinces, together with the Quebec Bridge. The Hudson Bay Railway was included in the Canadian Government Railways until 1926, when it was transferred back to the Department of Railways and Canals for completion, and appropriations on its account were deducted. These Canadian Government Railways appropriations do not include the operating deficits of the Canadian Government Railways for 1919 and 1920 nor the deficits of the Eastern Lines since July 1, 1927, but include investments for construction, purchase and working capital of the Canadian Government Railways and the operating deficits of these railways since their consolidation with the system in 1921, except as already mentioned. As the book value of these properties is included on the asset side of the balance sheet, the cost of these roads to the Dominion is included in the liabilities of the system as an offset. The construction or purchase of these roads was financed by the Dominion from the Consolidated Revenue Fund, and while for book-keeping purposes their cost is set up as a system liability, they are not a debt and carry no interest obligation.

In a rather different class are the loans and advances made by the Government to the Canadian National Railways or constituent companies on notes, bonds and receiver certificates with accrued simple interest ranging from 3½ to 6 p.c. In computing the public debt of Canada the Finance Department considers these railway loans and advances as "non-active assets" similar to investments in canals, public works, etc., and as such does not subtract them from the gross debt in computing the net debt; similarly, no interest is charged by the Finance Department on the railway advances. The railways, however, debit their accounts with the accrued interest on these Government advances, although no such interest has been paid.

The debt due to the public includes debenture stock maturing and perpetual, and bonds and mortgages of the constituent railways, but does not include the capital stock of the Grand Trunk Railway held by the Government, nor the cost of acquiring the same. Likewise it does not include the capital stock of the Canadian Northern system. The stock of the Grand Trunk Pacific is all held by the Canadian National system and is therefore not included either.

21.—Long-Term Debt[1] of Canadian National Railways (Including Appropriations for Canadian Government Railways), Showing Principal Outstanding at end of calendar years 1922-32, and New Funds Raised, calendar years 1922-32.

PRINCIPAL OUTSTANDING AT END OF EACH YEAR.

Year.	Due to Dominion Government.			Due to Public.				Grand Total.
	Appropriations for Canadian Government Railways.[2]	Loans and Advances.	Total.[3]	Guaranteed by—		Unguaranteed.	Total.	
				Dominion Government.[4]	Provincial Governments.			
	$	$	$	$	$	$	$	$
[5]	375,047,706[6]	115,607,457	497,602,331	331,309,904	93,423,985	384,762,530	809,496,419	1,307,098,750
1922	442,062,571	506,945,969	1,018,337,343	447,872,904	93,574,380	263,055,860	804,503,144	1,822,840,488
1923	447,643,526	567,870,480	1,114,183,276	470,372,904	93,574,380	259,151,772	823,099,056	1,937,282,332
1924	451,712,485	560,397,958[7]	1,142,268,435	558,872,904	93,574,380	261,465,799	913,913,083	2,056,181,518
1925	453,935,303	572,685,535	1,188,482,341	581,372,904	93,574,380	256,382,019	931,329,303	2,119,811,644
1926	437,412,033	594,300,367	1,225,663,756	579,872,891	93,574,380	252,032,973[8]	925,480,244[8]	2,151,144,000
1927	436,416,387	595,538,349	1,258,096,742	657,181,330	93,574,380	230,626,027	981,381,737	2,239,478,479
1928	417,279,953	614,912,221	1,290,216,482	681,000,655	93,574,380	203,313,998	977,889,033	2,268,105,515
1929	417,150,141	601,446,082[9]	1,308,684,662	807,048,434	91,926,527	223,584,532	1,122,559,493	2,431,244,155
1930	403,443,935	604,406,239	1,330,006,076	854,431,995	72,184,488	241,949,380	1,168,565,863	2,498,571,939
1931	405,209,240	604,406,239	1,363,788,592	970,562,289	72,184,488	233,710,430	1,276,457,207	2,640,245,799
1932	405,170,073	695,723,207[10]	1,489,823,661[10]	965,831,382	72,184,488	226,501,297	1,264,517,167	2,754,340,828

NEW FUNDS AVAILABLE DURING EACH YEAR.

Year.	Appropriations for Canadian Government Railways.	Loans and Advances.	Total.	Dominion Government.	Provincial Governments.	Unguaranteed.	Total.	Grand Total.
1923	1,573,970	60,924,511	62,498,481	22,500,000	-	Cr. 3,904,088	18,595,912	81,094,393
1924	452,176	Cr. 7,472,522[7]	Cr. 7,020,346	88,500,000	-	2,314,027	90,814,027	83,793,681
1925	Cr. 85,545	12,287,577	12,202,032	22,500,000	-	Cr. 5,083,780	17,416,220	29,618,252
1926	7,227	21,614,832	21,622,059	Cr. 1,500,013	-	Cr. 4,349,046	Cr. 5,849,059	15,773,001
1927	63,718	1,237,982	1,301,700	77,308,439	-	Cr. 21,406,946	55,901,493	57,203,192
1928	165,243	19,373,872	19,539,115	23,819,325	-	Cr. 27,312,029	Cr. 3,492,704	16,046,411
1929	113,000	Cr. 13,466,139[9]	Cr. 13,353,139	126,047,779	Cr. 1,647,853	20,270,534	144,670,460	131,317,321
1930	1,674,204	2,960,157	4,634,361	47,383,561	Cr. 19,742,039	18,364,848	46,006,370	50,640,731
1931	1,765,305	-	1,765,305	116,130,294	-	Cr. 8,238,950	107,891,344	109,656,649
1932	Cr. 39,166	91,316,968	91,277,802	Cr. 4,730,907	-	Cr. 7,209,133	Cr. 11,940,040	79,337,762
Total Increases	5,690,132[11]	188,777,238	194,467,370	517,958,478	Cr. 21,389,892	Cr. 36,554,563	460,014,023	654,481,393

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[1] See Table **22** for short-term loans. [2] Deficits of Eastern Lines are met by separate appropriations by the Dominion Government and are not included herein. [3] Total includes unpaid accrued interest on Government loans amounting to $69,328,803 at the end of 1922 and increasing by some $30,000,000 each year to the sum of $388,930,381 at the end of 1932. [4] Includes $216,207,142 perpetual debenture stock guaranteed as to interest only. [5] Dates at which constituent lines were taken over by Canadian National were: Canadian Northern, Sept. 30, 1917; Grand Trunk Pacific, March 9, 1919; Grand Trunk, May 21, 1920; Canadian Government, March 31, 1919 (actual date of transfer Nov. 20, 1918). [6] Including Hudson Bay Railway $14,531,706. [7] Repayment of temporary loan of $14,259,436. [8] Central Vermont Railway bonds of $9,902,866 were included in annual report but excluded here. [9] Temporary loan of $4,884,639 repaid and temporary loan of $8,561,500 for redemption of Central Vermont Railway bonds repaid and included in guaranteed bond issue of $50,000,000, June 15, 1930. [10] This total will be reduced in 1933 by applying thereto the cash deficit in 1932 of $53,422,662. [11] The appropriations for Canadian Government Railways include a credit of $42,582,630 for properties transferred to other Government Departments, etc., not representing new funds available, *viz.:* Hudson Bay Railway, 1926, $15,245,889—Halifax Harbour Commission, 1928, $12,830,122—Saint John Harbour Commission, 1928, $645,183—1921-22 deficits, 1930, $12,499,126—Quebec Bridge adjustment $933.564 and other adjustments $428,746.

Table **22** analyses the capital raised and expended by the Canadian National Railways. In addition to the funds available under long-term debt, as shown in Table **21**, the railways have frequently had short-term loans, and have received compensation for reductions of revenue under the Maritime Freight Rates Act. The second part of the table shows how the capital thus made available has been expended.

22.—Capital Raised and Expended by Canadian National Railways, calendar years 1923-32.

CAPITAL RAISED.

Year.	Long-Term Debt.	Short-Term Loans.	Government Compensation for Eastern Lines Deficit. (M.F.R. Act.)	Total Capital Receipts.
	$	$	$	$
1923	81,094,393	10,008,500	–	91,102,893
1924	83,793,681	Cr. 10,000,000	–	73,793,681
1925	29,618,252	–	–	29,618,252
1926	15,773,001	Cr. 6,600	–	15,766,401
1927	57,203,192	Cr. 1,400	2,211,139	59,412,931
1928	16,046,411	43,507,250	4,358,314	63,911,975
1929	131,317,321	1,321,850	4,933,854	137,573,025
1930	50,640,731	10,823,942	6,645,644	68,110,317
1931	109,656,649	Cr. 20,645,291	8,712,762	97,724,120
1932	79,337,762	Cr. 35,008,251	6,635,845	50,965,356
Totals	**654,481,393**[1]	–	**33,497,558**	**687,978,951**[1]

CAPITAL EXPENDED.

Year	Cash Deficits.	Net Additions and Betterments, and Improvements on Leased Railway Property.	Investments in Miscellaneous Physical Property.	Investments in Affiliated Companies.	Investments in Sinking and Insurance Funds.	Discount on Funded Debt.	All Other Accounts.	Total Expenditures.
	$	$	$	$	$	$	$	$
1923	22,844,217	51,039,697	3,924,976	4,144,599	8,639,557	352,457	157,390	91,102,893
1924	21,395,656	25,962,188	15,852,279	2,473,155	Cr.1,553,788	3,020,620	6,643,571	73,793,681
1925	8,813,830	19,580,428	Cr.630,904	6,271,577	2,485,483	225,620	Cr. 7,127,782	29,618,252
1926	Cr. 10,710,443	23,054,673	1,407,866	1,658,228	4,861,926	Cr.574,099	Cr. 3,931,750	15,766,401
1927	5,869,218	45,882,882	214,053	1,827,421	341,796	2,060,319	3,217,242	59,412,931
1928	Cr. 7,275,990	40,733,163	3,300,991	13,026,572	4,523,464	994,404	8,609,371	63,911,975
1929	21,974,110	86,718,700	1,781,208	Cr.6,162,879	1,589,236	3,088,068	28,584,582[2]	137,573,025
1930	32,962,841	61,352,880	5,207,474	12,066,022	2,165,596	1,856,574	Cr.47,501,070[3]	68,110,317
1931	63,088,100	28,985,360	5,301,707	1,371,140	1,116,689	3,365,813	Cr. 5,504,689	97,724,120
1932	62,364,176	Cr. 588,319	1,387,477	950,736	440,639	Cr.913,404	Cr. 12,675,949	50,965,356
Totals	**221,325,715**[1]	**382,721,652**[4]	**37,747,127**	**37,626,571**[5]	**24,610,598**	**13,476,372**	**Cr. 29,529,084**	**687,978,951**

[1] Interest on Government loans not included. [2] Increase in special deposits, $25,415,179. [3] Decrease in special deposits, $41,175,428. [4] Excludes transfer of $31,583,630 investment in Central Vermont lines transferred from "Investments in Affiliated Companies" to "Investment in Road and Equipment" in 1930 accounts, also transfer of $29,780,426 for Canadian Government Railways property transferred per footnote 11 of Table **21**, $17,230,683 for retirement of abandoned lines, principally duplicate lines of Grand Trunk Pacific and Canadian Northern, west of Edmonton, held in suspense until 1930, $3,021,486 for Toronto Suburban Railway for which a receiver was appointed in 1931, and other miscellaneous additions and deductions. [5] See footnote 4 for transfer to "Investment in Road and Equipment".

The figures given in Table **22** differ somewhat from the figures given in the annual reports of the railways by reason of certain accounting adjustments (not representing new funds or expenditures) entered into the accounts during the period but excluded herefrom. It should be noted, however, that the total cash deficit of $221,325,715 for the period 1923-32 does not include $11,505,416 of accounting adjustments and $9,388,962 appropriated for investment in the Insurance Fund. If these items are included, the total deficit for the ten-year period is $242,220,094 as shown in Table **20**.

Table **23** has been compiled to reconcile the investments in and loans to the Canadian National Railways (including Canadian Government Railways) as shown in the Public Accounts for the fiscal year ended Mar. 31, 1932, with the debt to the Dominion Government shown in the railway's balance sheet, Dec. 31, 1931. The last section of the table shows the adjustments to the statement in Public Accounts which make up the difference.

Table **24** shows the assets of the Canadian National Railways at Dec. 31, 1922, and at Dec. 31, 1932, with the increase or decrease for the ten-year period.

23.—Adjustments Accounting for Difference in Railway Obligations as shown by Public Accounts, Mar. 31, 1932, and by Canadian National Railways Balance Sheet, Dec. 31, 1931.

FROM PUBLIC ACCOUNTS, MAR. 31, 1932.		
Canadian Government Railways—		
Schedule "E"—Miscellaneous Current Accounts—Canadian Government Railways	$	15,748,921.60
Schedule "G"—Public Works (railways)—Canadian Government Railways		390,787,290.48
Total, Canadian Government Railways	$	406,536,212.08
Canadian National Railways—		
Schedule "L"—Railway Accounts—Loans non-active	$	614,406,239.42
Less: Canadian Northern stock purchased		10,000,000.00
Total, Canadian National Railways	$	604,406,239.42
Total, per Public Accounts	$	1,010,942,451.50
FROM CANADIAN NATIONAL RAILWAYS BALANCE SHEET, DEC. 31, 1931.		
Dominion of Canada Account—		
a. Canadian Government Railways appropriations account	$	405,209,240.07
b. Loans from Dominion		604,406,239.42
c. Interest on loans accrued but unpaid		354,173,113.03
Total, per Canadian National Railways Balance Sheet	$	1,363,788,592.52
Difference	$	**352,846,141.02**
ADJUSTMENTS ACCOUNTING FOR DIFFERENCE.		
Canadian Government Railways—		
Adjusted automatically by current differences due to closing of Railway books at Dec. 31, 1931	Cr. $	93,425.00
Canadian National Railways—		
Advances for Working Capital (C.G.R. Stores and Open Accounts) written off to Profit and Loss	Cr.	573,177.05
Expenditures out of Cash Loans for Hudson Bay Railway Capital	Cr.	457,526.76
Expenditures out of Cash Loans for Hudson Bay Railway Deficits	Cr.	202,843.20
Unpaid interest accrued on Loans not set up in Public Accounts		354,173,113.03
Total, Adjustments to Public Accounts Accounting for Difference	$	**352,846,141.02**

24.—Assets of the Canadian National Railways System, Dec. 31, 1922 and 1932.

Account.	Dec. 31, 1922.	Dec. 31, 1932.	Increase (+) or Decrease (−).
	$	$	$
INVESTMENTS—			
Investment in road and equipment	1,765,323,644	2,136,895,347	+371,571,703[1]
Improvements on leased railway property	1,492,123	3,532,070	+ 2,039,947
Sinking funds	4,629,855	19,851,491	+ 15,221,636
Deposits in lieu of mortgaged property sold	6,171,808	4,898,846	− 1,272,962
Miscellaneous physical property	34,767,914	59,650,506	+ 24,882,592
Investments in affiliated companies	24,253,323	29,045,428	+ 4,792,105
Other investments	5,789,464	2,291,378	− 3,498,086
Totals, Investments	1,842,428,131	2,256,165,066	+ 413,736,935
CURRENT ASSETS—			
Cash	14,651,422	7,644,258	− 7,007,164
Special deposits	6,139,435	6,298,655	+ 159,220
Loans and bills receivable	11,600	-	− 11,600
Traffic and car service balances receivable	2,528,622	627,878	− 1,900,744
Net balances receivable from agents and conductors	5,386,673	3,427,483	− 1,959,190
Miscellaneous accounts receivable	16,857,420	7,237,493	− 9,619,927
Dominion Government, operating deficit on Eastern Lines	-	887,075	+ 887,075
Materials and supplies	41,408,999	34,565,179	− 6,843,820
Interest and dividends receivable	377,003	825,494	+ 448,491
Rents receivable	112,269	53,974	− 58,295
Other current assets	106,775	543,092	+ 436,317
Totals, Current Assets	87,580,218	62,110,581	− 25,469,637
DEFERRED ASSETS—			
Working fund advances	166,847	192,161	+ 25,314
Insurance and other funds	352,488	19,606	− 332,882
Other deferred assets	11,805,962	7,136,882	− 4,669,080
Totals, Deferred Assets	12,325,297	7,348,649	− 4,976,648
UNADJUSTED DEBITS—			
Rents and insurance premiums paid in advance	322,059	235,915	− 86,144
Discount on capital stock	634,960	189,620	− 445,340
Discount on funded debt	1,919,635	15,396,007	+ 13,476,372
Other unadjusted debits	12,820,903	4,018,989	− 8,801,914
Totals, Unadjusted Debits	15,697,557	19,840,531	+ 4,142,974
Grand Totals	**1,958,031,203**	**2,345,464,827**	**+ 387,433,624**

[1] See footnote 11 to Table **21.**

PART III.—ELECTRIC RAILWAYS.[1]

The cheap and reasonably rapid conveyance of human beings is a necessity of modern urban life and one important means by which this necessity is supplied throughout Canada is the electric street railway, generally operated by the hydro-electric energy which is so important a feature of Canadian economic life.

Historical.—Replacing the horse car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated at the Toronto Exhibition grounds. Before many years their safety and convenience resulted in the discarding of the older system. An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. This was followed by the completion of the Ottawa Electric Railway in 1891, and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the 1890's, while in the newer western cities electricity was used from the commencement. In the cities of Eastern Canada, electric street railways are generally operated by private companies under city franchises, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the municipalities, a fact indicated in Table **28**. In 1921, on the expiry of the 30-year franchise of the Toronto Street Railway Co., the railway in this second largest city of Canada was taken over by the city and is now being operated by a transportation commission.

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[1] Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on Electric Railways in Canada.

Many difficulties are met in operating the cars during the winter season, owing to snow. This, however, has been overcome by the use of sweepers, scrapers and ploughs. The single overhead trolley system has been found the most suitable and is in general use. During the past few years an increasing number of motor buses have been used; in 1924 only 48 were operated, but by 1931 the number had increased to 547.

In addition to the street railways there is quite a large mileage of electric suburban or interurban lines, especially in the Toronto, Niagara and Lake Erie district, where considerable freight traffic is carried, and on the Pacific coast, where the British Columbia Electric Railway operates several hundred freight cars.

Development of Electric Railway Traffic.—Figures for the year 1893 show that 30 companies, with a paid-up capital of about $9,000,000, operated 256 miles of railway. By 1897, 35 companies made returns showing 583 miles of track, 1,156 cars, 26,431,017 miles run, 83,811,306 passengers carried and capital of $18,727,355. In 1904, 44 companies showed 766 miles of track, 2,373 passenger cars, 42,066,124 car miles run, 181,689,998 passengers and capital of $50,399,188. The statistics for 1931 show that during that year 52 companies with a capital of $215,818,096, had 1,959 miles computed as single track, 4,044 passenger cars, 547 buses, 491 freight cars and 52 electric locomotives, 133,883,489 car miles run, and 720,468,361 fare passengers. The number of employees in the service of electric railways on Dec. 31, 1931, was 17,135, as compared with 18,340 in 1930. Total salaries and wages for the year 1931 were $24,647,391, as against $26,954,994 in 1930.

Statistics of Electric Railways.—Summary statistics of the operation of electric railways in Canada from 1901 to 1931 inclusive are given by years in Table **25**. It may be noted in this table that the carriage of freight reached its maximum in 1928, with 3,888,672 tons, while the number of fare passengers carried in 1929 reached a new record of 833,496,866, decreasing in 1931 to 720,468,361. In Table **26** statistics of mileage and equipment are given for the latest four calendar years, and statistics of the capital liability of electric railways are furnished for the years 1908-31 in Table **27**. Detailed figures of the mileage operated, the capital liability, the earnings, operating expenses, passengers carried, employees, and salaries and wages, are given for 1931 in Table **28**, while Table **29** shows by years from 1919 to 1931 the number of passengers, employees and others killed and injured on electric railways in Canada.

25.—Summary of Statistics of Electric Railway Operation, years ended June 30, 1901-19, and calendar years 1919-31.

Year.	Single Track Mileage in Operation.	Total Car Mileage.	Passengers.	Freight.	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.	Employees.
	miles.	miles.	No.	tons.	$	$	p.c.	No.
1901	552·91	31,750,754	120,934,656	287,926	5,768,283	3,435,162	59·55	–
1902	557·59	35,833,841	135,681,402	266,182	6,486,438	3,802,855	58·63	–
1903	759·36	38,028,529	155,662,812	371,286	7,233,677	4,472,858	61·83	–
1904	766·50	42,066,124	181,689,998	400,161	8,453,609	5,326,516	63·01	–
1905	793·12	45,959,101	203,467,217	510,350	9,357,125	5,918,194	63·25	–
1906	813·74	50,618,836	237,655,074	506,024	10,966,871	6,675,037	60·87	–
1907	814·52	53,361,227	273,999,404	479,731	12,630,430	7,373,251	58·38	–
1908	992·03	56,964,881	299,099,309	732,475	14,007,049	8,695,880	62·08	–
1909	988·97	60,152,846	314,026,671	–	14,611,484	8,885,235	60·81	10,557
1910	1,047·07	65,249,166	360,964,876	852,294	17,100,789	10,121,781	59·19	11,390
1911	1,223·73	72,618,806	426,296,792	1,228,362	20,356,952	12,096,134	59·42	13,671
1912	1,308·17	82,070,064	488,865,682	1,435,525	23,499,250	14,266,675	60·71	14,760
1913	1,356·63	89,005,216	597,863,801	1,957,930	28,216,111	17,765,372	62·96	16,351
1914	1,560·82	98,917,808	614,709,819	1,845,923	26,691,007	19,107,818	64·36	16,195
1915	1,590·29	96,964,829	562,302,373	1,433,602	26,922,900	18,131,842	67·35	14,795
1916	1,673·77	82,516,612	580,094,167	1,936,674	27,416,285	18,099,906	66·02	10,622
1917	1,743·54	84,073,046	629,441,997	2,333,539	30,237,664	20,098,634	66·47	11,696
1918	1,616·36[1]	84,435,323[1]	487,365,456[1]	2,497,530[1]	24,299,890[1]	17,535,975[1]	72·16[1]	11,646[1]
1919	1,696·52	106,961,607	686,124,263	2,474,892	35,696,532	26,839,071	75·18	17,242
1919[2]	1,686·78	110,206,344	749,334,380	2,374,612	40,698,586	31,385,702	77·12	16,940
1920[2]	1,698·76	114,481,406	804,711,333	2,687,314	47,047,246	37,242,483	79·16	17,341
1921[2]	1,687·37	111,576,949	719,305,441[3]	2,282,292	44,536,832	35,945,316	80·71	17,015
1922[2]	1,724·60	116,711,189	738,908,949	2,441,212	49,660,485	35,986,872	72·47	18,099
1923[2]	1,736·31	119,374,416	737,282,038	3,141,992	50,191,387	36,171,923	72·07	17,779
1924[2]	1,736·77	119,803,072	726,497,729	2,543,669	49,439,559	36,125,213	73·07	17,379
1925[2]	1,737·52	119,684,151	725,491,101	2,701,823	49,626,231	35,426,487	71·39	16,933
1926[2]	1,684·18	122,935,055	748,710,836	3,489,183	51,723,199	36,453,709	70·50	16,961
1927[2]	1,652·15	131,583,717	781,398,194	3,265,237	53,506,401	37,616,568	70·30	18,090
1928[2]	1,653·22	133,689,589	808,023,615	3,888,672	55,632,761	38,782,719	69·71	18,697
1929[2]	1,636·76	139,199,634	833,496,866	3,653,411	58,268,980	40,085,140	68·79	18,801
1930[2]	1,508·99	140,014,000	792,701,493	2,872,929	54,719,259	39,125,515	71·50	18,340
1931[2]	1,386·06	133,883,489	720,468,361	1,977,441	49,088,310	35,367,068	72·05	17,135

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[1] Not including Montreal Tramways and several other units. [2] Calendar year.

[3] The Toronto Transportation Commission which operated for the last four months of 1921 only and did not report would increase this number by about 80,000,000 or possibly bring it up to the 1920 record.

26.—Mileage and Equipment of Electric Railways in the calendar years 1928-31.

Item.	1928.	1929.	1930.	1931.
	miles.	miles.	miles.	miles.
Length of first main track	1,653·22	1,636·76	1,508·99	1,386·06
Length of second main track	565·66	565·27	571·37	572·69
Totals, Main Track	2,218·78	2,202·03	2,080·36	1,958·75
Length of sidings and turnouts	293·94	302·50	286·80	278·63
Totals, Computed as Single Track	**2,512·72**	**2,504·53**	**2,367·16**	**2,237·38**

Equipment.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.
Passenger cars—				
closed	3,576	3,670	3,625	3,579
open	94	106	90	76
combination open and closed	5	–	–	–
combination passenger and baggage	20	17	16	13
without electrical equipment	383	390	369	376
Totals, Passenger Cars	**4,078**	**4,183**	**4,100**	**4,044**
Baggage, express and mail cars	28	30	30	25
Freight cars	629	572	516	491
Buses	399	484	520	547
Snow ploughs	68	80	73	70
Sweepers	168	164	161	165
Miscellaneous	318	291	323	330
Locomotives	61	75	53	52
Totals, Units of Equipment	**5,749**	**5,879**	**5,776**	**5,724**

27.—Capital Liability of Electric Railways, years ended June 30, 1908-19, and calendar years 1919-31.

NOTE.—The totals here given do not include $493,346 aid paid by Governments and municipalities.

Year.	Stocks.	Funded Debt.	Total.	Year.	Stocks.	Funded Debt.	Total.
	$	$	$	$	$	$	$
1908	50,295,266	37,114,619	87,409,885	1920[1]	91,321,955	79,504,449	170,826,404
1909	51,946,433	39,658,556	91,604,989	1921[1]	91,169,885	86,017,551	177,187,436
1910	58,653,826	43,391,153	102,044,979	1922[1]	76,949,185	111,309,789	188,258,974
1911	62,251,203	49,281,144	111,532,347	1923[1]	76,674,185	122,395,685	199,069,870
1912	70,829,118	52,012,828	122,841,946	1924[1]	76,482,085	137,285,575	213,767,660
1913	62,079,767	79,155,864	141,235,631	1925[1]	58,567,242	163,201,978	221,769,220
1914	66,311,098	81,284,244	147,595,342	1926[1]	57,779,518	158,029,002	215,808,520
1915	66,696,675	83,647,327	150,344,002	1927[1]	58,873,778	163,678,939	222,552,717
1916	67,738,275	87,157,309	154,895,584	1928[1]	50,653,071	170,649,165	221,302,236
1917	70,606,520	90,628,219	161,234,739	1929[1]	54,453,321	167,969,494	222,422,815
1918	73,864,820	93,388,273	167,253,093	1930[1]	53,048,929	171,040,610	224,089,539
1919	93,042,368	78,852,188	171,894,556	1931[1]	45,155,649	170,662,447	215,818,096
1919[1]	91,757,418	81,283,922	173,041,340				

[1] Calendar year.

28.—Mileage, Capital, Earnings, Operating Expenses, Passengers, Employees, and Salaries and Wages of Electric Railways in Canada, year ended Dec. 31, 1931.

Name of Railway.	Mileage Operated.	Capital Liability.	Gross Earnings.	Operating Expenses.	Fare Passengers Carried.	Employees.	Salaries and Wages.
	miles.	$	$	$	No.	No.	$
Brandon Municipal[1]	7·65	450,000	19,910	31,235	321,006	20	20,100
Brantford and Hamilton[10]	–	–	29,062	32,945	103,783	–	14,991
Brantford Municipal[1]	17·73	490,500	120,574	112,504	2,292,295	64	77,380
British Columbia	220·23	23,992,063	5,313,866	4,371,210	72,144,921	2,037	3,211,889
Calgary Municipal[1]	53·06	2,815,097	771,713	559,300	12,946,995	250	422,669
Canadian National Electric Railways; Toronto Suburban District[7]	–	–	70,861	109,192	125,961	–	63,173
Cape Breton Electric Co.[8]	–	–	42,206	42,363	514,307	–	20,623
Receiver of Cape Breton Electric Co.[9]	–	–	42,991	35,441	519,807	–	18,868
Cape Breton Tramways, Ltd	21·10	4,545	9,729	9,074	118,317	43	4,839
Cornwall Street Ry., Light and Power Co.	5·00	330,000	99,768	58,763	1,321,936	39	52,015
Eastern Light and Power Co.[12]	–	–	46,885	49,622	574,909	–	31,008
Edmonton Radial[1]	33·23	2,987,265	731,332	522,154	12,227,167	251	373,024
Fort William Street[1]	20·56	1,229,000	146,836	139,887	2,370,895	63	90,426
Grand River	18·63	551,000	271,765	237,952	742,671	145	175,055
Hamilton, Grimsby and Beamsville[10]	–	–	29,859	45,923	143,828	–	20,665
Hamilton Radial[11]	–	–	8,176	3,646	–	–	2,767
Hamilton Street	18·00	3,205,000	1,321,411	990,939	19,420,103	424	542,933
Hull Electric	16·54	292,000	258,749	218,869	3,941,172	111	138,882
Hydro-Electric Railways: Guelph District[1,3]	6·41	384,482	75,608	78,140	1,100,718	38	46,256
International Transit Co.	4·97	150,000	50,981	42,567	925,712	19	26,778
Kitchener Public Utilities Street Ry. Dept.[1]	6·55	202,462	111,356	80,531	2,507,990	34	53,008

For footnotes see end of table, p. 678.

28.—Mileage, Capital, Earnings, Operating Expenses, Passengers, Employees, and Salaries and Wages of Electric Railways in Canada, year ended Dec. 31, 1931—concluded.

Name of Railway.	Mileage Operated.	Capital Liability.	Gross Earnings.	Operating Expenses.	Fare Passengers Carried.	Employees.	Salaries and Wages.
	miles.	$	$	$	No.	No.	$
Lake Erie and Northern	51·00	3,817,500	222,746	222,749	230,772	108	121,686
Lethbridge Municipal[1]	8·25	456,171	42,145	40,087	742,649	18	29,546
Lévis Tramways Co.	11·50	1,115,000	144,331	112,254	2,235,413	74	77,302
London and Port Stanley (Lessors)	24·50	1,775,194	–	–	–	–	–
London and Port Stanley (Lessees)		2,003,500	365,114	395,416	477,511	119	166,803
London Street	22·36	1,112,480	560,902	465,403	9,961,664	195	271,619
Moncton Tramways, Electricity and Gas Co., Ltd	2·72	1,125,400	4,949	20,302	99,798	7	9,603
Montreal Tramways	158·09	55,997,300	14,500,960	9,286,986	232,141,103	4,891	6,818,187
Montreal and Southern Counties[2]	55·99	500,000	425,713	449,397	2,737,650	179	255,825
Moose Jaw	9·00	795,372	41,514	43,206	662,019	24	30,033
Nelson Municipal[1]	3·38	46,000	16,647	28,598	359,060	14	15,811
New Brunswick Power Co.	16·60	2,817,695	383,593	298,372	6,392,600	136	162,773
Niagara Falls Park and River Division of the Inter. Ry.	11·65	600,000	90,377	127,353	485,576	36	66,143
Niagara, St. Catharines and Toronto[2].	58·20	925,000	636,448	618,259	4,035,734	341	412,859
Nipissing Central[6]	10·52	4,433,991	46,392	56,062	495,956	20	30,742
North Yonge St. Railways[5]	10·34	107,549	96,365	100,885	1,029,775	–	–
Nova Scotia Light and Power Co.	14·12	7,176,256	696,570	482,358	11,387,465	193	342,519
Oshawa[2]	8·78	40,000	204,735	152,404	669,969	84	108,974
Ottawa	27·68	6,281,300	1,644,936	1,033,029	26,529,752	511	686,961
Port Arthur Civic[1]	13·43	551,984	152,326	134,346	2,440,589	56	91,498
Quebec Railway, Light and Power Co.[4]	23·43	–	1,063,274	901,849	18,086,262	473	585,764
Regina Municipal[1]	20·22	1,946,018	297,219	242,859	4,293,639	105	183,420
Sandwich, Windsor and Amherstburg[1],[3].	43·89	5,816,205	688,748	704,706	9,522,017	290	386,400
Saskatoon Municipal[1].	15·73	1,376,419	281,625	230,027	4,516,089	100	154,058
Sarnia Street[13]	–	–	8,546	10,624	76,142	–	6,236
Shawinigan Falls Terminal	3·39	437,833	90,673	77,515	–	26	36,621
Sherbrooke Railway and Power Co.	10·30	2,466,000	115,073	131,689	1,203,645	64	78,488
Suburban Rapid Transit Co.	15·94	600,000	143,286	104,418	2,512,975	–	–
Sudbury, Copper Cliff Suburban	7·90	248,100	79,811	60,982	700,702	18	29,714
Three Rivers Traction Co.	8·90	905,700	129,262	138,754	2,018,142	60	73,517
Toronto Transportation Commission[1]	120·05	34,671,293	12,639,774	7,912,766	187,090,330	4,182	6,246,217
Township of York and Town of Weston[1], [5].	8·06	1,143,166	274,408	214,614	5,582,617	–	–
Windsor, Essex and Lake Shore Rapid[1], [3]	36·12	1,300,000	158,884	198,618	739,140	64	99,170
Winnipeg	64·68	35,246,256	3,112,416	2,464,907	45,704,371	1,175	1,616,272
Winnipeg, Selkirk and Lake Winnipeg	39·68	900,000	154,910	133,017	942,742	34	45,281
Totals	**1,386·06**	**215,818,096**	**49,088,310**	**35,367,068**	**720,468,361**	**17,135**	**24,647,391**

[1] Municipally owned. [2] Stock owned by Canadian National Rys. [3] Operated by the Hydro-Electric Power Commission of Ontario. [4] Citadel division operations only. Total capital and operations of the Montmorency division are included in steam railways. [5] Operated by Toronto Transportation Commission. [6] Provincially owned. [7] Ceased operation Aug. 15, 1931. [8] Went into receivership Mar. 23, 1931. [9] Sold to Eastern Light and Power Co. June 15, 1931. [10] Ceased operation June 30, 1931. [11] Leased to Canadian National and Toronto, Hamilton and Buffalo Railways July 13, 1931. [12] Sold to Cape Breton Tramways Nov. 23, 1931. [13] Ceased operation Feb. 25, 1931.

29.—Numbers of Passengers, Employees and Others Killed and Injured on Electric Railways, calendar years 1919-31, with Totals from 1894 to June 30, 1919.

NOTE.—Details for years ended June 30, 1900-19, are given on p. 611 of the 1926 Year Book.

Calendar Year.	Passengers.		Employees.		Others.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Totals, 1894 to June 30, 1919	**259**	**23,802**	**162**	**5,009**	**833**	**10,698**	**1,254**	**39,419**
1919	4	1,717	29	951	58	1,505	91	4,173
1920	9	1,968	7	658	75	1,434	91	4,060
1921	5	1,110	8	609	35	666	48	2,385
1922	6	2,260	10	873	31	700	47	3,833
1923	6	2,465	11	1,652	45	790	62	4,907
1924	2	2,279	6	1,262	54	824	62	4,365
1925	9	2,272	5	1,736	37	744	51	4,752
1926	3	2,420	7	1,642	66	879	76	4,941
1927	–	2,090	7	1,508	71	1,260	78	4,858
1928	1	2,735	12	1,114	86	1,139	99	4,988
1929	5	2,808	5	1,200	93	1,372	103	5,380
1930	8	2,790	6	1,003	50	1,269	64	5,062
1931	1	2,245	3	758	61	1,144	65	4,147

PART IV.—EXPRESS COMPANIES.[1]

"Express service is an expedited freight service on passenger trains". But express companies do not own the means of performing their services; they use railway facilities by virtue of contracts with the railway companies. Express companies in Canada have had close relations with the railways practically from the beginning. A brief history of the various express companies will be found on pp. 611-12 of the 1926 Year Book.

Before 1915, an express company in Canada was not liable for delay or damage caused by anything quite beyond its control, thus maintaining itself as an entity separate from the railway company. Thenceforth an express company became liable for delay or injury of goods if either was caused by the railway company in whose cars the goods were being carried.

Goods are sent by express for quick transit, so that express rates do not compete with freight rates. Thus in its first tariff the Dominion Express Co., in pursuance of its contract with the Canadian Pacific Railway, gave a rate of 2½ times the maximum first-class railway freight rate for the same goods carried the same distance. The majority of the contracts between express and railway companies for carrying express freight are on the basis of a percentage of the gross express revenue. The rates are subject to the approval of the Board of Railway Commissioners.

Express Company Operations.—During 1931, the latest year for which the statistics of the Transportation Branch of the Dominion Bureau of Statistics are available, there were four Canadian and one American express organizations operating in Canada. The Canadian Pacific Express Co., formerly the Dominion Express Co., is a subsidiary of the Canadian Pacific Railway and handles the express business on the railways and the inland and ocean steamship lines of the parent company. The express business of the Canadian National system is handled by a department of the railway. The British America Express Co. operated over the Algoma Central until Feb. 28, 1931, when it ceased operations. The Central Canada Express Co. was formerly operated over the Central Canada, the Edmonton,

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[1] Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues an annual report on Express Statistics.

Dunvegan and British Columbia, and the Alberta and Great Waterways Railways, but in 1927 its business was taken over by the Canadian National Express Department. With the amalgamation of these railways in 1929 and formation of the Northern Alberta Railways Company, the express business was handled by a department of the new company from Nov. 1, 1929. The Railway Express Agency, Inc., operates over the Canadian sections of United States railways and over the route from Skagway to points in Yukon. These companies are organized under powers conferred by Acts of the Dominion Parliament and their business consists in the forwarding of parcels, the transfer of baggage and the issue of money orders, travellers' cheques, letters of credit and other forms of financial paper. The total capital liabilities of the two Canadian companies and of the Canadian National Express Department stood at $8,739,594 on Dec. 31, 1931.

Statistics of the receipts and expenses of express companies in Canada are given in summary form for all companies for the years 1919 to 1931 in Table **30**, and for each company for the year 1931 in Table **31**. In these tables the amounts paid by express companies to the carriers, *i.e.*, railways, steamship lines, etc., for transporting the express matter, are shown under the heading "express privileges". Table **31** also shows the mileage operated by each company in 1931. Of the total of 62,726 miles, 42,336 were over steam railways, 313 over electric railways, 14,227 on ocean steamship services (mainly by the Canadian Pacific lines) and 5,676 miles on inland or coastal steamboat routes.

30.—Summary Statistics of Revenues and Expenses of Express Companies, calendar years 1919-31.

NOTE.—Similar figures for the years ended June 30, 1911-19, were published at p. 673 of the 1927-28 Year Book.

Calendar Year.	Gross Earnings.	Operating Expenses.	Express Privileges.	Net Operating Revenue.
	$	$	$	$
1919	24,933,219	13,227,652	12,936,615	−1,231,048
1920	30,512,504	16,120,880	16,009,460	−1,617,836
1921	32,504,894	15,601,187	16,549,915	353,792
1922	28,697,332	13,596,518	14,581,789	519,025
1923	27,625,700	13,217,780	14,342,410	65,511
1924	26,196,017	12,723,651	13,557,168	−84,802
1925	25,876,342	12,336,485	13,312,960	226,897
1926	26,554,378	12,442,257	13,466,863	645,258
1927	26,532,182	12,548,374	13,275,355	708,453
1928	27,674,270	13,032,376	13,459,187	1,182,707
1929	27,758,385	13,480,028	13,598,575	679,782
1930	24,352,181	12,759,439	12,380,060	−787,318
1931	20,115,285	11,292,957	10,909,184	−2,086,856

31.—Revenues, Expenses and Operating Mileage of Express Companies, by Companies, calendar year 1931.

Company.	Gross Earnings.	Operating Expenses.	Express Privileges.	Net Operating Revenue.	Mileage Operated.
	$	$	$	$	No.
British America Express	13,197[1]	4,661[1]	6,599[1]	1,937[1]	[1]
Canadian National Railways	10,643,992	5,795,942	4,752,754	95,295	24,177
Canadian Pacific Express	8,486,842	5,098,869	5,596,057	−2,208,084	32,652
Northern Alberta Railways	107,072	38,643	56,694	11,736	928
Railway Express Agency	864,182	354,842	497,080	12,260	4,969
Totals	**20,115,285**	**11,292,957**	**10,909,184**	**−2,086,856**	**62,725**

[1] Ceased operation Feb. 28, 1931.

32.—Business Transacted by Express Companies in Financial Paper, calendar years 1928-31.

Description.	1928.	1929.	1930.	1931.
	$	$	$	$
Money orders, domestic	63,968,315	62,812,788	52,941,500	42,706,134
Money orders, foreign	1,338,257	1,494,848	1,190,244	658,677
Travellers' cheques, domestic	5,180,857	5,474,960	5,928,660	4,857,697
Travellers' cheques, foreign	1,558,322	1,789,439	1,115,289	686,375
"C.O.D." cheques	8,295,720	8,206,098	7,194,178	5,324,188
Telegraphic transfers	492,691	561,414	557,869	486,738
Other forms	2,331,129	2,335,914	1,707,910	916,814
Totals	**83,165,201**	**82,675,461**	**70,635,650**	**55,638,623**

PART V.—ROADS AND HIGHWAYS.[1]

Historical.—The early roads were auxiliary to water routes as avenues of transportation. They were used during the summer season, when portages were necessary to avoid obstacles to river and lake travel, and during the winters, when ice prevented navigation and snow covered the inequalities of the ground. Even the extensive system of waterways of Eastern Canada was an inadequate means of communication between points of settlement in a rapidly growing colony, and the need for overland routes manifested itself in the introduction of the system of common roads which prevailed under the old *régime*. Not only did the crude early roads serve the needs of the settlers, but also those of the British, French and American armies during the numerous campaigns. Soldiers were frequently employed, in times of peace, on road construction in different parts of Upper and Lower Canada.

The first important highway in Canada extended along the north shore of the St. Lawrence from Quebec to Montreal, being gradually completed with the growth of the French settlements. In Upper Canada, one of the earliest roads (Yonge St.) was that from Toronto to lake Simcoe, completed in 1794 under the direction of Governor Simcoe, the work being done by the Queen's Rangers. This road not only gave access to the area north of Toronto, but also provided a more convenient route than that of the Ottawa river from the trading posts on the Upper Lakes to the centres of population along the St. Lawrence. Montreal was joined to Kingston by road in 1816, and in the following year to Toronto. Thereafter, other highways to inland settlements, from points served by water routes, began to increase in number, as it became apparent that they were essential to the commercial life of the country for transporting supplies to the settlers and bringing their products to the central markets of the colony. The system of posts, which had been established about the beginning of the nineteenth century, necessitated passable routes between the various points, and by 1827 a through road was available between Halifax and Amherstburg, comprising for the most part the old Kempt road, the York road, Dundas street and the Baldoon road. From this trunk line of communication branch roads extended north and south to the more important centres of population in the two Canadas. The cost of construction of these roads was high, and travel by stage coach was tedious and costly. As late as 1850 some points in central Ontario were still inaccessible to any vehicle. Later years, however, have brought with them improved methods of construction and a resulting reduction in expenses, together with an improvement in the wearing qualities of the more important highways.

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[1] Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics, which publishes an annual report entitled "Highways and Motor Vehicles in Canada".

Recent Highway Development.—The growth of motor traffic during and since the War has greatly stimulated the movement for increased and improved road construction. Good roads associations assisted by the automobile clubs are to be found in most of the provinces for the education of the public in the need for improved highways. With the rapid increase in the percentage of motor car owners to the population (see p. 685-6) the demand for improved roads became insistent after the War. Furthermore, the advantages to be gained by attracting touring motorists have been a powerful incentive to governing bodies to improve trunk roads and scenic highways within their jurisdictions. One sphere where the motor car has been of special economic advantage has been in rural areas, where its speed and economy are a great improvement over the old horse-drawn vehicle. As a result, in the 1931 census every second farm reported a farm-owned motor vehicle (1·96 farms per farm-owned motor vehicle). This widespread rural ownership of automobiles has resulted in the improvement of secondary rural roads.

A table of road mileage in Canada follows. When it is considered that throughout the Dominion there are about 26 persons to every mile of road and that on an average there is one mile of road for every 9 square miles of land, the magnitude of the problem faced in the construction of these traffic routes is realized. A small population scattered over a large area has made this, like other transportation problems, particularly difficult of solution.

33.—Classification of Canadian Highways, by Provinces, Dec. 31, 1931.

Province.	Unimproved.	Improved Earth.	Gravel.	Water-bound Macadam.	Bituminous Macadam.	Bituminous Concrete.	Cement Concrete.	Total.
	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
P.E. Island	1,999·2	1,396·0	245·9	–	–	4·7	1·5	3,650·0
Nova Scotia	6,949·3	3,434·8	4,287·4	30·2	17·5	–	–	14,719·2
New Brunswick	2,418·0	4,353·0	5,039·0	–	13·0	–	–	11,825·0
Quebec	20,673·0	242·9	12,590·9	1,486·6	234·8	405·7	129·3	35,763·2
Ontario	–	19,518·0[3]	43,066·7	546·8	808·4	1,078·5	1,392·7	66,411·1
Manitoba[1]	[5]	1,496·9	3,642·9	–	–	81·0	9·9	5,230·7
Saskatchewan	56,769·3	96,726·9	2,113·0	–	–	–	–	155,609·2
Alberta	41,000·0	19,723·0	1,633·0	–	70·0	–	–	62,426·0
British Columbia[2]	3,178·5	10,849·7	8,029·1	119·9	71·7	122·4	50·5	22,459·6
Totals	**132,987·3**	**157,741·2**	**80,647·9**	**2,183·5**	**1,215·4**	**1,692·3**	**1,583·9**	**378,094·0[4]**

[1] Manitoba figures are as at April 30, 1931. [2] B.C. figures are as at Mar. 31, 1931. [3] Includes some unimproved earth roads. [4] Includes 42·5 miles of other classes. [5] 23,056 reported for 1930.

The great improvement indicated above in the extent and character of Canadian highways has entailed the expenditure of large sums by governing bodies, chiefly provincial or municipal authorities, as roads are under their jurisdiction. Unfortunately, there are no comprehensive or comparable statistics available regarding these expenditures prior to 1928. Expenditures by the Dominion Government have taken the form of subsidies to the provinces for specific highways and have been made under the Canada Highways Act, 1919, largely in the few years immediately after the War, and under relief legislation during the present depression to aid in providing useful employment. These subsidies paid in 1931 are shown in Table **34**.

The Canada Highways Act.—Partly in response to the general demand for improved highways and partly to increase civilian employment at the end of the War, the Dominion Parliament, by c. 54 of the Statutes of 1919, authorized the expenditure of $20,000,000 for the purpose of constructing and improving the highways of Canada during the five years succeeding the passage of the Act. In its apportionment, grants of $80,000 were made to each province during each of the five years, the remainder being allotted in proportion to their respective populations. Details as to cost, time, methods of construction, etc., of all roads built under the scheme were to be arranged between the Minister of Railways and Canals and the various Provincial Government Departments. By c. 4 of 1923 and c. 4 of 1925 the operation of the Act was extended to April 1, 1928. A table on p. 669 of the Canada Year Book, 1929, shows the working of the Act and the allocation of expenditure as between the Dominion and the various provinces down to Mar. 31, 1928. By that time the grant had been expended. Road projects subsidized under the Act amounted to 8,753 miles with an estimated subsidizable cost of $49,581,192.

Road Expenditures by Provinces and Municipalities.—Table **34** presents the available statistics of expenditures on highways in the four latest years. However, the limitations of the statistics in this table should be clearly realized. These expenditures cover only national and provincial highways, secondary highways and other important roads to which the Provincial Governments contribute, together with the bridges or ferries necessary to such highways. The figures do not include expenditures on roads or streets within urban municipalities, nor expenditures by rural municipalities on local roads to which no contribution is made by the Provincial Governments. Expenditures for both construction and maintenance of municipal roads receiving subsidies are often made over and above the amounts upon which subsidies are granted and these extra expenditures are not included. No data regarding municipal expenditures for either construction or maintenance are available in Saskatchewan. Altogether, the record of expenditures by municipalities is very incomplete. In the Maritime Provinces all road expenditures are made by the Provincial Governments.

34.—Capital and Maintenance Expenditures on Provincial Highways or Provincially Subsidized Highways in Canada, calendar years 1928-31.

CAPITAL EXPENDITURES.

Province.	1928.	1929.	1930.	1931.
	$	$	$	$
Prince Edward Island	183,000	237,000	190,000	310,000
Nova Scotia	2,700,000	1,248,037	2,808,554	4,197,512
New Brunswick	3,603,150	5,521,430	7,328,285	3,595,651
Quebec	3,890,300	6,471,432	10,092,281	11,872,767
Ontario	20,610,949	22,351,703	26,025,136	23,708,855
Manitoba	1,817,093	2,970,998	3,080,739	2,779,216
Saskatchewan	2,329,000	5,926,630	9,437,007	6,702,181
Alberta	1,399,708	4,391,600	5,574,952	4,378 861
British Columbia	3,400,654	6,054,330	5,461,279	8,705,186
Canada	**38,912,029**	**55,173,160**	**69,998,233**	**66,250,229**
Dominion subsidies	–	–	–	4,262,545
Provincial expenditures	–	–	56,022,066	51,373,740
Municipal expenditures	–	–	13,976,167	10,613,944

MAINTENANCE EXPENDITURES.

Province.	1928.	1929.	1930.	1931.
Prince Edward Island	130,000	153,000	145,000	340,800
Nova Scotia	1,840,000	1,782,138	2,055,824	1,895,458
New Brunswick	350,897	1,035,168	993,864	747,121
Quebec	4,419,500	4,360,861	5,108,690	4,855,460
Ontario	8,810,954	9,584,523	9,741,537	8,123,150
Manitoba	325,000	588,301	734,328	906,013
Saskatchewan	288,105	541,335	745,398	1,048,664
Alberta	–	651,556	1,080,746	2,086,754
British Columbia	1,777,100	2,412,804	2,497,430	2,283,733
Canada	**18,963,381**	**21,109,686**	**23,102,817**	**22,287,153**
Dominion subsidies	–	–	–	19,090
Provincial expenditures	–	–	19,088,384	18,746,163
Municipal expenditures	–	–	4,014,433	3,521,900

Provincial Funded Debt Incurred for Highways.—Table **35** shows the funded debts of the provinces outstanding at Dec. 31, 1931, which were incurred for highway development. These amounts should not be confused with estimates of the total investment in highways. The cost of constructing a new road is considerably greater than that of putting a permanent surface on an old road; the latter has been the purpose of much of the provincial expenditure.

The maintenance expenditures by the Provincial Highway Departments during 1931 amounted to $18,746,163, while the annual charges for highway debt were $19,772,829, a total provincial charge of $38,518,992. The provinces collected $42,662,241 in licences, gasolene taxes, tolls, etc., in connection with highway traffic. While these left an apparent surplus of $4,143,249, no provision was made for the cost of administering highway and motor vehicle departments, for traffic patrols, nor for any expenditures by municipalities for either road maintenance or interest and retiring charges on capital expenditures.

35.—Provincial Government Funded Highway Debt and Annual Charges thereon, Dec. 31, 1931.

Province.	Amount.	Annual Interest and Sinking Fund.	Province.	Amount.	Annual Interest and Sinking Fund.
	$	$		$	$
Prince Edward Island	1,175,000	174,687	Manitoba	16,546,393	888,984
Nova Scotia	19,748,930	1,063,686	Saskatchewan	28,645,587[1]	1,067,876
New Brunswick	35,928,810	1,620,000	Alberta	29,370,399	1,859,754
Quebec	38,877,000	1,605,215	British Columbia	41,604,416	2,378,916
Ontario	162,566,276	9,113,711			
			Totals	**374,462,811**	**19,772,829**

[1] As at April 30, 1931.

PART VI.—MOTOR VEHICLES.

The earliest motor vehicles were propelled by steam, the history of the gasolene motor car commencing with the successful construction of a gasolene engine by Daimler in 1884. Until 1900 France remained the headquarters of the industry, possessing in that year more than half of the 10,000 cars in operation in Europe, while in the United States the number of cars was only about 700. Shortly afterwards, the development of the Ford car resulted in a keen competition to bring motor cars within the reach of the average man, profits being secured from large production rather than high prices. Detroit became the centre of the automobile industry of the United States and the Canadian side of the Detroit river became the headquarters of the Canadian industry. As a consequence, the population of the border towns Windsor, Walkerville and Sandwich greatly increased between 1911 and 1921, while the town of Ford (now East Windsor), which had no existence in 1911, had 5,870 inhabitants in 1921 and 14,251 in 1931, when the aggregate for the "Border Cities" was 98,179. Problems of regional location have resulted, during more recent years, in a gradual shifting of the centre of the industry, and the Toronto and Oshawa districts now rival in importance the older established centre on the Detroit river.

Like many other inventions, the motor car commenced as a toy, then became a luxury of the rich, while now it ranks as a necessity of life to a large proportion of the population. In the past few years, the motor truck and the motor bus have assumed considerable economic importance, and are separately classified in Table **37.**

Up to the present the motor vehicle has affected the passenger traffic of the steam and electric railways more than the freight. Eleven inter-urban and seven urban electric railways have ceased operation since 1926, and passenger traffic on the smaller electric railways and on the steam railways has declined during the last decade instead of increasing with increased population. This diversion of passenger traffic has been effected largely by the private automobile, although the motor bus is rapidly becoming more important and is now operating between all large centres. The motor truck is also carrying an increasing amount of freight, although no statistics showing the tonnage handled are as yet available.

The automobile manufacturing industry in Canada has made very rapid growth since its beginning about the year 1905, two of its chief tendencies during the period having been a consolidation of smaller firms into large units and the adoption of large-scale methods of production, similar in many ways to those of the United States industry. A brief statement of its history, with statistics of production, etc., is to be found on pp. 432-6 of the Canada Year Book, 1924, while more recent statistics of production will be found in Chapter XIV. (See also the Manufactures chapter of this volume.)

Section 1.—Statistics of Motor Vehicle Operation.[1]

Registration.—The increase in the use of motor vehicles in Canada has been very rapid. In 1904 the number of motor vehicles registered in Ontario was only 535. In 1907, 2,130 motor vehicles were registered in six provinces and in 1908, 3,033 in eight provinces, the motor car being at that time prohibited in Prince Edward Island. From these small beginnings Table **36** shows an increase to 1,232,486 motor vehicles by 1930. For the last two years decreases have been recorded. In Table **37** the numbers of motor vehicles registered in 1931 and 1932 are given by provinces, classified as passenger cars, commercial cars or trucks, motor buses and motor cycles.

The average population per vehicle registered was 8·6 in 1931. Canada ranked fourth in this respect, the United States being first with 5·1. On the basis of the total registration of 1,114,503, only three countries had larger numbers in 1931, *viz.*, United States, 26,093,457; Great Britain and Northern Ireland, 1,949,471; and France, 1,984,681.

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[1] Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. The subject is treated in greater detail in "Highways and Motor Vehicles in Canada", published annually by this Branch.

36.—Number of Motor Vehicles Registered in Canada, by Provinces, calendar years 1907-32.

NOTE.—The number of motor vehicles in Yukon is included in the totals for Canada, 1914-32.

Year.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1907	–	62	–	254	1,530	–	54	55	175	2,130
1908	–	65	104	296	1,754	412	74	65	263	3,033
1909	–	69	167	485	2,452	662	149	275	504	4,763
1910	–	148	299	786	4,230	1,524	531	423	1,026	8,967
1911	–	228	483	1,878	11,339	2,436	1,304	1,631	2,220	21,519
1912	–	456	700	3,535	16,266	4,099	2,286	2,505	4,289	34,136
1913	26	511	824	5,452	23,700	5,475	4,659	3,773	6,138	50,558
1914	31	1,324	1,328	7,413	31,724	7,359	8,020	4,728	7,628	69,598
1915	34	1,841	1,900	10,112	42,346	9,225	10,225	5,832	8,360	89,944
1916	50	3,012	2,965	15,335	54,375	12,765	15,990	9,516	9,457	123,464
1917	303	5,350	5,251	21,213	83,308	17,507	32,505	20,624	11,645	197,799
1918	639	8,100	6,434	26,897	114,376	24,012	50,531	29,300	15,370	275,746
1919	967	10.210	8,306	33,547	144,804	30,118	56,855	34,000	22,420	341,316
1920	1,419	12,450	11,196	41,562	177,561	36,455	60,325	38,015	28,000	407,064
1921	1,751	14,205	13,615	54,670	206,521	40,215	61,184	40,235	32,900	465,378
1922	2,167	16,159	13,746	61,995	240,933	42,200	61,367	40,642	34,526	513,821
1923	2,483	18,354	16,829	72,448	280,996	42,428	67,337	44,841	41,053	586,850
1924	2,583	20,764	19,975	85,145	308,693	44,322	70,754	51,148	48,626	652,121
1925	2,955	22,853	19,022	97,657	344,112	51,241	79,078	54,357	56,618	728,005
1926	3,460	25,879	21,541	108,332	388,728	57,857	97,267	65,590	68,009	836,794
1927	4,388	30,059	24,544	128,459	436,120	63,905	106,599	73,830	77,612	945,672
1928[1]	5,404	35,113	27,970	148,090	488,804	70,641	119,972	88,398	86,079	1,070,664
1929[1]	6,116	39,972	31,736	169,105	541,912	77,259	128,426	98,720	95,468	1,188,929
1930[1]	7,376	43,029	34,699	178,548	562,658	78,830	127,193	101,119	98,784	1,232,486
1931[1]	7,744	43,758	33,627	177,485	562,220	75,210	107,981	94,727	97,932	1,200,907
1932	6,982	41,153	28,044	165,730	531,597	71,570	91,275	86,878	91,042	1,114,503

[1] Revised figures.

In Table **37** the registration of motor vehicles in 1931 and 1932 is given according to the general type or purpose of the cars in use in each of the provinces.

37.—Types of Motor Vehicles Registered in Canada, by Provinces, calendar years 1931 and 1932.

Province.	Passenger Cars.[1]	Commercial Cars or Trucks.[2]	Motor Buses.	Motor Cycles.	Total.[3]
	No.	No.	No.	No.	No.
1931.					
Prince Edward Island	6,917	799	3	25	7,744
Nova Scotia	36,431	6,911	30	386	43,758
New Brunswick	29,223	4.164	62	178	33,627
Quebec	146,266	28,384	517	2,318	177,485
Ontario	489,713	67,808	629	4,070	562,220
Manitoba	64,940	9,697	33	540	75,210
Saskatchewan	91,846	15,788	41	306	107,981
Alberta	79,225	15,034	85	383	94,727
British Columbia	79,451	16,799	248	1,434	97,932
Yukon	125	86	4	8	223
Totals	**1,024,137**	**165,470**	**1,652**	**9,648**	**1,200,907**
1932.					
Prince Edward Island	6,181	768	4	29	6,982
Nova Scotia	33,798	6,958	62	335	41,153
New Brunswick	24,030	3,819	60	135	28,044
Quebec	135,594	27,411	500	2,225	165,730
Ontario	462,923	63,888	698	4,088	531,597
Manitoba	61,420	9,540	80	530	71,570
Saskatchewan	75,685	15,292	26	272	91,275
Alberta	72,079	14,293	97	409	86,878
British Columbia	73,516	15,933	209	1,384	91,042
Yukon	129	88	3	12	232
Totals	**945,355**	**157,990**	**1,739**	**9,419**	**1,114,503**

[1] Includes taxicabs.
[2] Includes tractors, road machines, flushers, and municipal fire engines, etc., in Ontario and in Quebec.
[3] Revised to exclude dealers' cars and include road tractors.

Government Revenue.—The taxation of motor vehicles, garages, chauffeurs, etc., is becoming a lucrative source of Provincial Government income. In every province the operation of automobiles and motor cycles is dependent on carrying licences duly issued by the various authorities, while similar licences permit the maintenance of garages and the driving of cars or trucks by hired chauffeurs. Perhaps the most recent form of levy on the use of motor vehicles is the gasolene tax, which has been assessed in all provinces since 1927. The following table shows the provincial revenue for the years 1931 and 1932, indicating, at the same time, the more important sources from which it is derived.

38.—Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, for the years 1931 and 1932.

Province.	Passenger Cars.	Trucks, etc.	Motor Cycles.	Dealers' Licences.	Operators and Chauffeurs.	Mileage Tax on Motor Buses and Trucks.	Gasolene Tax.	Total, including Miscellaneous Revenue.
	$	$	$	$	$	$	$	$
1931.								
P. E. Island	117,784	13,818	125	1,345	1,365	–	112,867	248,565
Nova Scotia	807,446	221,098	2,336	7,382	90,869	1,708	878,082	2,067,694
New Brunswick	612,445	165,795	–	6,613	57,250	4,017	696,481	1,574,035
Quebec	2,977,026	1,364,424	7,523	20,870	970,535	16,292	4,405,160	9,895,772
Ontario[1]	3,066,140	1,482,243	11,770	35,498	709,058	99,322	10,810,914	16,606,222
Manitoba	778,490	114,456	2,353	9,750	98,563	–	1,094,700	2,115,259
Saskatchewan	1,229,698	292,922	1,758	18,495	24,574	–	1,310,147	2,924,126
Alberta	1,075,320	258,679	1,773	23,575	18,597	57,719	1,472,068	2,931,729
British Columbia	1,582,442	413,660	7,528	16,594	46,423	–	1,765,700	3,865,253
Yukon[2]	1,220	900	24	224	–	–	–	2,372
Totals	**12,248,011**	**4,327,995**	**35,190**	**140,346**	**2,017,234**	–	**22,546,119**	**42,231,027**
1932.								
P. E. Island	104,368	14,103	164	1,085	1,348	–	134,398	256,854
Nova Scotia	748,050	212,458	2,131	6,780	86,147	1,086	957,781	2,064,606
New Brunswick	573,122	148,015	–	4,651	75,325	2,303	782,261	1,621,127
Quebec	2,672,312	1,337,907	7,025	19,488	866,286	29,806	5,250,172	10,471,373
Ontario[1]	4,387,609	1,856,145	11,727	31,711	666,150	202,445	13,510,755	21,100,214
Manitoba	712,370	118,600	2,160	–	99,960	15,200	1,514,260	2,479,050
Saskatchewan	1,144,831	267,613	1,480	13,385	59,312	711	1,328,951	2,847,038
Alberta	1,290,828	413,705	1,907	19,575	15,808	13,044	1,551,227	3,334,854
British Columbia	1,405,735	382,514	6,708	12,524	136,760	–	2,053,511	4,032,039
Yukon[2]	1,389	727	48	–	–	–	–	2,432
Totals	**13,040,614**	**4,751,787**	**33,350**	**109,199**	**2,007,096**	**264,595**	**27,083,316**	**48,209,587**

[1] Revenue figures for Ontario are for fiscal year ended Oct. 31. [2] No gasolene tax.

Imports and Exports of Motor Vehicles.—Imports and exports of motor vehicles in the fiscal years ended 1908 to 1932 are shown, by numbers of cars and by values, in Table **39.** In the earlier years the imports of cars far exceeded the exports, but as the Canadian automobile manufacturing industry became established, exports commenced to exceed imports and in the four fiscal years up to and including 1926 averaged between two or three times the value of the imports. During the fiscal year 1927, however, while the exports almost maintained the high figures of previous years, the imports increased so much as again to approach the value of the exports, and in the fiscal year 1928 the imports exceeded the exports by nearly $9,000,000, owing to a continued increase in the importation of motor vehicles of all kinds and to the contraction in exports caused by the closing down of the factories of one of the largest makers of low-priced cars, pending the introduction of new models. In the fiscal year 1929, with this firm again producing, the total number of cars exported was more than double the number imported, and the proportion was about the same in 1930. Both imports and exports were greatly reduced in 1931 and 1932 due to the world-wide depression. The importation of parts had increased with the growth of the industry and amounted in the fiscal years ended Mar. 31, 1928 and 1929, to $33,237,181 and $55,761,414 respectively, but decreased in 1930 to $35,746,929, in 1931 to $19,597,213 and in 1932 to $13,451,825. In the same fiscal years exports (including re-exports) of automobile parts were $3,304,937, $3,804,743, $3,555,523, $1,933,048 and $1,330,125 respectively.

39.—Imports and Exports of Motor Vehicles, fiscal years ended Mar. 31, 1908-32.

Fiscal Year.	Imports of Motor Vehicles.				Exports of Motor Vehicles (including re-exports).			
	Passenger.		Freight.[1]		Passenger.		Freight.[2]	
	No.	$	No.	$	No.	$	No.	$
1908	674	912,971	–	–	205	320,708	–	–
1909	533	585,097	–	–	279	450,127	–	–
1910	1,424	1,732,215	–	–	448	627,469	–	–
1911	3,488	4,235,196	–	–	787	892,212	–	–
1912	6,022	6,511,115	–	–	2,156	2,039,993	–	–
1913	8,377	9,738,839	–	–	4,091	2,952,988	–	–
1914	6,288	7,213,375	–	–	6,691	4,321,369	–	–
1915	5,476	4,888,704	–	–	5,579	3,290,234	–	–
1916	8,055	5,089,329	–	–	17,493	9,223,813	–	–
1917	12,037	7,981,177	327	423,824	10,331	5,637,465	–	–
1918	16,118	11,317,245	964	1,275,179	8,829	4,471,521	–	–
1919	6,473	5,326,510	1,744	2,274,748	11,867	6,328,447	2,584	1,347,521
1920	10,805	11,204,461	2,274	3,831,084	20,883	13,589,423	4,166	2,319,629
1921	5,907	8,399,537	1,706	3,578,938	15,870	11,867,425	3,441	2,733,775
1922	7,181	9,501,362	806	1,537,765	13,676	7,879,845	1,314	673,038
1923	11,402	11,857,165	1,082	1,889,105	45,372	25,987,515	3,726	1,456,795
1924	9,549	9,532,350	1,340	1,910,808	54,939	27,566,869	15,419	5,545,225
1925	8,835	8,726,714	934	1,364,664	44,626	22,393,397	11,790	4,055,796
1926	14,935	14,022,814	1,189	1,772,414	61,860	29,888,014	19,238	6,300,327
1927	29,202	23,882,455	2,548	3,200,626	51,639	24,244,987	20,423	6,899,526
1928	35,783	29,234,603	4,208	5,187,889	32,076	19,833,969	15,115	5,611,929
1929	42,447	34,173,547	7,417	8,795,929	72,524	31,654,942	31,499	11,845,468
1930	33,834	28,060,872	5,078	6,403,794	50,873	23,690,765	29,732	12,140,486
1931	17,058	13,358,529	2,987	3,913,361	24,739	11,079,979	13,584	5,289,455
1932	4,796	3,816,447	799	939,306	6,623	2,916,732	2,915	1,138,956

[1] Freight automobiles were classified with passenger automobiles in figures of imports until 1917.
[2] Freight automobiles were classified with passenger automobiles in figures of exports until 1919.

Section 2.—Motor Vehicle Acts and Regulations.[1]

In all provinces a motor vehicle must be registered and each person who operates a car must be licensed as a chauffeur, an operator, or a beginner. The following is a brief synopsis of the regulations in force in each province.

Prince Edward Island.—Under the Highway Traffic Act, 1930, and Regulations, all cars must be registered in the office of the Provincial Secretary. In addition to a registration fee of $2.50 for cars not previously registered in the province and a marker fee of $1, an annual tax of 70 cents per 100 pounds weight is payable on Mar. 1, but is not required of non-residents if the province or State of origin grants exemptions to Prince Edward Island privately-owned passenger motor vehicles. Every car must have a lock or other device to prevent it from being operated when left unattended. The speed limits are: in cities, towns and villages 15 miles an hour; on approaches to steep descents, bridges, or highway crossings 10 miles an hour; on roads outside cities or incorporated towns on which the driver has not a clear view for at least one hundred yards free from turns and intersections 15 miles an hour; and in other places a speed reasonable and proper.

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[1] The information in this Section has been revised by the officials in charge of the administration of Motor Vehicle Acts and Regulations in the different provinces.

Nova Scotia.—The Motor Vehicle Act requires cars to be registered by the Motor Vehicle Branch, Department of Highways, which issues permits renewable annually on Jan. 1, but usually extended to Mar. 31. Cars belonging to persons residing outside of Nova Scotia need not be registered, if registered where the owners reside and operated for private use. This privilege is given for not more than three months in each year. If owners come into the province to reside permanently or to carry on business, they must register. Every person who operates a motor vehicle must be licensed as a chauffeur, an operator, or a beginner. Motor vehicles must be equipped as provided in the Uniform Vehicle Code. There is no set speed limit. The rate of speed must be reasonable and proper, and 20 miles per hour is *prima facie* reasonable and proper in a residential district, at intersections, passing schools, etc., and 40 miles per hour is *prima facie* reasonable and proper in open country. Commercial motor vehicles having a gross weight in excess of 4,000 lb., are limited to a maximum speed of 25 miles per hour.

New Brunswick.—Under the Motor Vehicle Law, 1926, the registering and licensing authority is the Motor Vehicle Branch, Department of Public Works. Cars must be registered when new and, besides the registration fee, an annual fee is payable on Jan. 1. Non-residents may not operate cars registered in another province during more than 90 days in any year without registering in New Brunswick. The speed limits are: in places which are closely built up, or in any city, town or village, 15 miles an hour; outside of any city, town or village where the road cannot be seen clearly for 200 yards, 20 miles an hour. Driving recklessly, or at a speed greater than 40 miles an hour on a highway, may result in a fine, imprisonment, or suspension of licence. All vehicles keep to the right.

Quebec.—The law regarding motor vehicles is contained in the Quebec Revised Statutes, 1925, c. 35. Cars must be registered in the office of the Provincial Treasurer and re-registered annually on Mar. 1. Certain government and municipal cars and farm tractors are given free registration, while exemptions are made in the case of pleasure cars registered in other provinces and certain commercial vehicles, but only in cases specified in Article 10 of the Act. Cars must have mufflers and, when left unattended, must be locked in such a way as to prevent operation. The speed limits are: in cities, towns and villages, 20 miles an hour; on highways where the land is closely built up, 20 miles an hour; and in open country, 30 miles an hour. Motor vehicles must be stopped before driving over a railway crossing. Motors must stop for street cars which are standing to take on or discharge passengers, and must reduce the speed to 16 miles an hour when meeting another vehicle. These rates have reference to pleasure cars only. In the case of a commercial vehicle having non-pneumatic tires, a speed of 8 miles an hour when loaded and 10 miles an hour when unloaded is allowed. When equipped with pneumatic tires the corresponding rates are 12 and 15 miles an hour. Motor buses are allowed a speed of 30 miles an hour in open country.

Ontario.—In this province the Highway Traffic Act, under the administration of the Motor Vehicles Branch of the Department of Highways, regulates the operation of motor vehicles on the highways. Motor vehicle permits and drivers' licences are issued for the calendar year. Vehicles owned by residents of other provinces who do not reside or carry on business in Ontario for more than three consecutive months in each year may be operated in Ontario without Ontario registration plates. Passenger cars registered in the United States may be operated in Ontario without Ontario plates for thirty days in any one year. The speed limit in cities, towns and villages is 20 miles an hour; in open country, 35 miles an hour. At intersections, level railway crossings and where the view of the driver is obscured the speed allowed is 10 miles within and 15 miles outside of cities, towns and villages. Vehicles must not pass street cars which are stationary for the purpose of taking on or discharging passengers. At intersections the motor vehicle on the right has the right of way and before entering or crossing a through highway a vehicle must be brought to a full stop. A motor vehicle must be equipped with non-glare headlights, muffler, windshield wiper and mirror. Under Part XIII of the Act a person convicted of certain serious offences in connection with the operation of motor vehicles or a person against whom an unsatisfied judgment is outstanding is required to file proof of his financial responsibility. All accidents resulting in personal injury, or property damage apparently exceeding $50, must be reported to the nearest provincial or municipal police officer.

Manitoba.—Under the Highway Traffic Act, 1930, cars must be registered in the office of the Municipal-Commissioner, and registration is renewable annually on Jan. 1. All drivers must be licensed. No person, not a resident of the province, shall operate without a licence for a period exceeding 30 days of the date of entry, unless the province or State in which he resides gives reciprocity in this respect. Penalties for driving a car while intoxicated include imprisonment, suspension of driver's licence and impounding of the car. No person shall operate a motor vehicle upon any highway or street at a greater speed than is reasonable and proper, having regard to the condition of the highway and the traffic. The onus of proof is on the motorist. No ray of light from any headlight shall be thrown in a horizontal direction at a greater height from the ground than 42 inches in front of the motor vehicle when travelling on the highways. The use of searchlights and glare headlights is absolutely forbidden on the highway. Number plates must be carried on the front and rear of the vehicles so as to be plainly visible. In the event of an accident the driver involved must render every help possible, and give his name and address to the police officer or, if no officer is at hand, report to the nearest police station or officer. Failure to comply may involve a fine of $50 or 30 days imprisonment.

Saskatchewan.—The licensing authority under the Vehicles Act is the Minister of Highways. Licences expire annually on Dec. 31, and for private vehicles are computed on the wheel base, the minimum fee being $10, the maximum $32.50. The licence fee in respect of cars registered on and after Aug. 1 is approximately one-third less than the annual fee. All motor vehicles except motor cycles must expose two number plates. The registration fee for a motor cycle is $6. The fee for motor trucks is computed on the gross weight. The owner of every truck to be operated for gain before securing a licence must obtain a permit from the Public Utility Board. Besides two licence plates, he receives two weight plates, embossed with the gross weight for which the licence fee has been paid.

The fee for a chauffeur's licence is $5. The fee for livery privileges is $8 more than the fee paid for private licence for the vehicle to be registered. Permits to operate for gain must be obtained from the Public Utility Board. Every driver of a motor vehicle not in possession of a chauffeur's licence, must secure an operator's licence.

A non-resident may use his motor vehicle for not more than three months in any year, but a non-resident operating a truck for gain must comply with the Public Utility Board requirements. Cities, towns and villages have authority to regulate speed limits within their boundaries. A loaded truck shall not be driven at more than 25 miles per hour, nor an unloaded truck at more than 35 miles per hour, while no motor vehicle may be driven at more than 35 miles per hour when passing any motor or other vehicle going in the opposite direction. Otherwise, speed is governed by the amount of traffic, the nature, condition and use of the highways. No motor vehicle and its load shall have a greater width than 96 inches, while no vehicle shall have a length of more than 33 feet, and no combination of vehicles coupled together shall have a length of more than 85 feet. The maximum height of a vehicle including its load is 14 feet and the maximum weight of any vehicle and its load must not exceed 20,000 lb. Motor vehicles must stop for street cars which are taking on or discharging passengers. Should a driver on leaving a stopping place in a city or town desire to turn, he may do so only at an intersection of the public highway.

Alberta.—The law relating to motor vehicles is contained in the Vehicles and Highway Traffic Act, 1924. The speed limits are: 20 miles an hour in cities, towns and villages; 10 miles an hour at street crossings and bridges; and 30 miles an hour outside cities, towns and villages. A motor car may not pass a street car which has stopped for passengers to get on or off. A resident of any other province of Canada, entering Alberta for pleasure touring for a period not greater than six months, is required to have complied with the motor-vehicle laws of his own province, and on entering Alberta to register with the Provincial Police. Residents of the United States entering Alberta for touring purposes may carry with them their customs certificates in lieu of registration. The Provincial Secretary may revoke or suspend the licence of any chauffeur convicted under the provisions of the Liquor Act of selling or having for sale intoxicating liquor. Provision is made for the impounding of cars where the owners or drivers are convicted of driving cars while intoxicated or convicted under other sections of the Act relating to speeding and juvenile driving. There is provision against the carrying of loaded weapons in an automobile—a preventive measure against accidents during hunting trips.

British Columbia.—Under the Motor Vehicle Act and amending Acts, all motor vehicles are to be registered with the Commissioner of Provincial Police. Trailers must also be licensed. Motor vehicles registered outside of the province may be used for touring purposes for a period up to six months providing that their owners obtain non-resident touring permits or carry the customs permits in the case of residents of the United States.

Motor vehicles are to be driven in a careful and prudent manner at all times. The onus is on the driver for driving to the common danger if driving at a greater speed than 20 miles per hour in any city, town or village, or 30 miles per hour outside cities, towns or villages, or greater than the maximum rate of speed stated on signs erected on certain portions of the highway. A motor vehicle may not pass a standing street car at more than 5 miles per hour, if such street car is not taking on or discharging passengers, and must stop at least 10 feet from the passenger exit if such street car is taking on or discharging passengers (in cities where safety zones are provided, motor vehicles are allowed to pass between safety zone and curb at a rate as set by by-law). A motor vehicle must not exceed a speed of 15 miles per hour when passing schoolhouses between the hours of 8 a.m. and 5 p.m. of any day on which school is regularly held, or public playgrounds for children between dawn and dusk. Accidents in which death or personal injury has occurred, or in which loss or injury apparently exceeding $25 is sustained, must be reported to the police.

No person shall ride as a passenger on a motor cycle in front of the person driving or operating the motor cycle. Provision is made for the surrender of drivers' licences upon conviction for an infraction of the Act or Regulations or of Section 285 of the Criminal Code; upon arrest or indictment for manslaughter a driver's licence is suspended. Drivers' and owners' licences of all persons convicted for certain serious offences in connection with the operation of motor vehicles, as well as all persons against whom an unsatisfied judgment for bodily injury or property damage in excess of $100 is outstanding, are suspended until such time as proof of financial responsibility is furnished by them.

Yukon.—The Motor Vehicle Ordinance, No. 14, 1914, with amendments, requires all cars to be registered in the office of the Territorial Secretary, who issues certificates renewable annually on April 1. A non-resident may operate an unregistered motor for not more than 90 days. In cities, towns and villages the speed limit is 15 miles an hour, and 10 miles an hour at street intersections.

PART VII.—AIR NAVIGATION.[1]

During 1932 civil aviation was well maintained. Aircraft are a ready means of obtaining accurate information of conditions in remote and unsettled parts, and provide easy access to them. Their use in developing and conserving natural resources has increased every year. Air-mail and air-transport lines are in operation in many parts of the Dominion.

Civil aviation in Canada is divided into two classes: (1) civil operations, carried out for other Government Departments under the Royal Canadian Air Force; (2) commercial aviation, under the regulation of the Controller of Civil Aviation. Both are under the Department of National Defence.

Civil Government Air Operations.—This branch carried out flying on forest fire patrols, fire suppression, oblique and vertical photography for surveys, transportation, etc., for different Government Departments in various parts of the country. The established bases were Winnipeg, Man., and Ottawa, Ont.

Provincial Operations.—The Ontario Provincial Air Service owns and operates 26 aircraft on forest fire protection, transportation, air photography and sketching in northern Ontario. Operations covered an area of about 800 miles from east to west, and 400 miles from north to south. A total of 9,968 hours was flown during 1932. The Manitoba Government Air Service was organized in 1932 and operated 5 aircraft on forest protection in the province for the Forestry Branch; a total of 882 hours was flown on this work. British Columbia and Quebec contracted with commercial aircraft operators for flying required.

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[1] Revised under the direction of J. A. Wilson, Esq., Controller of Civil Aviation, by A. E. Heatley, Department of National Defence.

Commercial Aviation.—During 1932 there were 150 commercial aircraft operators in Canada. Their activities included forest fire patrols, timber cruising, air photography, transportation of passengers, express and mail, instruction, advertising, short passenger flights, etc., in various parts of the country.

Air Mail Services.—Regular air-mail services were established in December, 1927. During 1932 commercial firms operated the following air-mail routes under Post Office Department contracts: *Winter Services.*—Leamington-Pelee Island; Quebec-Seven Islands-Anticosti; Moncton-Magdalen Islands; Moncton-Charlottetown. *Summer Services.*—Rimouski - Montreal. *Yearly Services.*—Montreal-Albany; Sioux Lookout-Red Lake area; Amos-Siscoe-Pascallis; McMurray-Aklavik; Winnipeg-Pembina; Peace River-North Vermilion; Resolution-Great Bear lake; Prince Albert-lac La Ronge; Vancouver-Victoria. Mail to the extent of 412,409 lb. was carried under contract, without loss or damage, during 1932. (See p. 741).

Encouragement of Aviation.—To encourage a more widespread interest and knowledge of aviation, the Department of National Defence, since 1928, has assisted by issuing two light aeroplanes to each of the twenty-five flying clubs in the following localities: Halifax, Cape Breton, Saint John, Granby, Montreal, McGill University, Brant and Norfolk, Fort William, Hamilton, Kingston, London, Ottawa, St. Catharines, Toronto, Border Cities, Kitchener, Brandon, Winnipeg, Moose Jaw, Regina, Saskatoon, Calgary, Edmonton, Vancouver, Victoria. Granby and Victoria have since withdrawn from the scheme. The total membership at present is 2,703. A total of 10,451 hours was flown. 129 members obtained private pilots' licences, and 27 members obtained commercial pilots' licences during 1932. Many aerodromes have been established through this movement.

A large air terminal has been built at St. Hubert, 7 miles south of Montreal. A mooring tower for airships and an aerodrome have been constructed there, and immigration, customs and postal facilities are available. A terminal aerodrome has also been constructed at Rimouski for the despatch and reception of trans-Atlantic mails by air.

Manufacture of Aircraft.—An aircraft industry, to construct in Canada the aircraft and equipment required for aviation, is essential to the sound development of flying. Canadian Vickers, the pioneer firm in Canada, maintain their own designing department and have produced several original types especially suited to operation in Canada. The increased interest and the growing operations of the Dominion and Provincial Governments and commercial operators have led to the establishment of increased manufacturing facilities. Several aircraft constructors from England and the United States have formed branches in Canada for the assembly and service of their products. The De Havilland Aircraft of Canada, Ltd., established a plant in Toronto for the service and assembly of their aircraft, chiefly of the "Moth" light-aeroplane type; the Curtiss-Reid Aircraft Co., established a factory at Cartierville, Que.; the Fairchild Aircraft Ltd., at Longueuil, Que.; the Boeing Aircraft of Canada, Ltd., at Vancouver; and the Ottawa Car Manufacturing Co., one at Ottawa for A. V. Roe aircraft. Aero engine factories are established for construction or assembly and service of their products as follows: Armstrong-Siddeley Motors, Ltd., at Ottawa; Aero Engines of Canada, Ltd., at Montreal, for "Wright" and "Bristol" engines; Canadian Pratt and Whitney Aircraft Co., Ltd., at Longueuil, Que.

40.—Statistical Summary of Civil Aviation in Canada, 1927-32.

Item.	1927.	1928.	1929.	1930.	1931.	1932.
General Analysis.	No.	No.	No.	No.	No.	No
Firms manufacturing aircraft	2	4	6	7	7	7
Firms chiefly operating aircraft	20	53	81	100	100	73
Firms using aircraft as auxiliary service	1	1	4	4	4	4
Aircraft flights made	16,748	75,285	144,143	156,174	144,080	102,219
Aircraft hours flown	12,070	43,071	79,786	92,993	73,645	56,170
Approximate aeroplane mileage	209,583	1,557,917	4,083,321	5,222,635	5,280,958	2,786,609
Approximate float seaplane mileage	247,238	797,998	1,768,738	2,024,219	1,553,721	1,503,157
Approximate boat seaplane mileage	372,189	352,029	426,064	286,628	180.620	198,792
Approximate amphibian mileage	–	20,341	5,956	13,938	30,950	80,573
Total aircraft mileage	829,010	2;728,414	6,284,079	7,547,420	7,046,276	4,569,131
Average flight duration (minutes)	43	32	33	36	30	33
Pilots carried	16,748	75,285	144,143	156,574	144,080	102,219
Passengers and crew carried	18,932	74,669	124,751	124,875	100.128	76,800
Total personnel carried	35,680	149,954	268,894	281,449	244,208	179,019
Pilots carried one mile (pilot-miles)	829,010	2,728,414	6,284,079	7,547,420	7,046,276	4,569,131
Passengers and crew carried 1 mile (passenger-miles)	1,424,031	2,883,782	6,114,997	5,408,676	4,073,552	2,869,799
Total personnel carried 1 mile (personnel-miles)	2,253,041	5,612,196	12,399,076	12,956,096	11,119,828	7,438,930
Total freight or express carried (lb.)	1,098,346	2,404,682	3,903,908	1,759,259	2,372,467	3,129,974
Total mail carried (lb.)	14,684	316,631	430,636	474,199	470,461	413,687
Licensed Civil Air Harbours.						
Total air harbours (all types)	36	44	77	77	78	83
Licensed Civil Aircraft.[1]						
Aeroplanes (single-engined)	30	124	281	316	286	259
Aeroplanes (triple-engined)	–	3	2	2	1	1
Float seaplanes (single-engined)	16	100	119	183	180	152
Boat seaplanes (single-engined)	21	33	37	21	23	26
Amphibians (single-engined)	–	4	6	5	5	7
Total aircraft (all types)	67	264	445	527	495	445
Licensed Civil Air Personnel.						
Pilots only (flying machines)	43	258	349	408	658	775
Pilot-Air Engineers	29	70	96	131	134	133
Air Engineers only (flying machines)	74	130	212	241	236	208
Total licensed personnel	148	458	657	780	894	983
Unlicensed air mechanics employed	59	8	150	164	131	52

[1] These figures show duplication, since in several instances the aircraft are used both as landplanes and seaplanes.

PART VIII.—CANALS.[1]

Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages, and to eliminate the toil of unloading, transporting and reloading at the portages the canals of Canada were constructed.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although the canals were constructed primarily for military purposes they soon became essential to the commercial life of the country.

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[1] Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on "Canal Statistics".

Section 1.—Canal Systems.

There are in Canada seven canal systems under the control of the Dominion Government in connection with navigable lakes and rivers. They consist of the canals (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the International Boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) from Trenton, lake Ontario, to lake Huron (not completed); (6) from the Atlantic ocean to Bras d'Or lakes, Cape Breton; and (7) from Winnipeg to lake Winnipeg. By means of these canals a total waterway of 1,846 miles has been opened to navigation, the actual mileage of canals being 509·40.

A detailed description of the individual canals was given on pp. 626-629 of the 1926 Year Book. Summary statistics of their length and lock dimensions are given in Table **41.**

41.—Canals of Canada, Length and Lock Dimensions, 1932.

Name.	Location.	Length.	Locks.			
			No.	Minimum Dimensions.		
				Length.	Width.	Depth.
		Miles.		ft.	ft.	ft.
St. Lawrence—						
Lachine	Montreal to Lachine	8·74	5	270	45	14[1]
Soulanges	Cascades Point to Coteau Landing.	14·67	5	280	45	15[1]
Cornwall	Cornwall to Dickinson's Landing...	11·00	6	270	43·67	14[1]
Farran's	Farran's Point rapids	1·28	1	800	50	16[1]
Rapide Plat	Rapide Plat to Morrisburg	3·89	2	270	45	14[1]
Galops	Iroquois to Cardinal	7·36	3	270	45	14[1]
Welland Ship	Port Weller, lake Ontario, to Port Colborne, lake Erie	27·60	8	859	80	30[2]
Sault Ste. Marie	St. Mary's rapids, 47 miles west of lake Huron	1·38	1	900	60	18·25[1]
Richelieu River—						
St. Ours Lock	St. Ours, Que	0·12	1	339	45	12[1]
Chambly	Chambly to St. Johns, Que	11·76	9	120·5	23·25	6·5
Ottawa and Rideau Rivers—						
Ste. Anne Lock	Junction of St. Lawrence and Ottawa rivers	0·12	1	200	45	9
Carillon	Carillon rapids, Ottawa river	0·94	2	200	45	9
Grenville	Long Sault rapids, Ottawa river	5·94	5	200	45	9·5
Rideau	Ottawa to Kingston	126·25	47	134	33	5
	Rideau lake to Perth (Tay branch)	7·25	2	134	33	5
Miscellaneous—						
Trent	Trenton to Peterborough lock, Peterborough	88·74	18	175	33	8·33
	Peterborough lock to Swift rapids	135·71	24	134	33	6
	Swift rapids to Port Severn	16·00	(marine railway)			4
	Port Severn lock	–	1	100	25	6
	Sturgeon lake to Lindsay (Scugog branch)	8·35	1	142	33	6
	Lindsay to Port Perry (Scugog branch)	26·65	–	–	–	4·5
Murray	Isthmus of Murray—bay of Quinte	5·15	–	–	–	11[3]
St. Peters	St. Peters bay to Bras d'Or lakes, Cape Breton, N.S	0·50	1	300	48	18
St. Andrews	Red river, 15 miles north of Winnipeg	–	1	215	45	17

[1] Navigable depths are occasionally less at times of extremely low water.
[2] Minimum depth in river 25 feet.
[3] With lake Ontario at elevation 244 feet above sea-level.

Government Expenditures on Canals.—Tables **42** and **43** deal with the expenditures of the Dominion Government on the construction and maintenance of canals. The principal source of revenue is rentals for water for power purposes. All canals, it may be added, have since 1904 been free of tolls to vessels applying for the privilege of locking facilities. The total capital cost of Canadian canals since their construction was begun is set at $244,835,826. The heavy capital expenditures in recent years are due to the construction of the Welland Ship Canal, on which $125,980,223 had been spent up to Mar. 31, 1932. The lock gates were first opened on Apr. 21, 1930, and upper lake vessels with certain restrictions were allowed through. In 1932 the largest of the lake vessels (633 feet long) used the canal and draughts up to 22 feet were accommodated.

42.—Expenditures and Revenues of Canals for Periods Before Confederation, 1868-1910, and fiscal years ended Mar. 31, 1911-32

NOTE.—For the individual years 1868 to 1910, see Canada Year Book, 1916-17, p. 462.

Fiscal Year.	Expenditure Chargeable—					Total Expenditure.	Total Revenue.
			to Revenue.[1]				
	to Capital.	to Income.[1]	Staff and Repairs, Canals in general.	Staff.	Repairs.		
	$	$	$	$	$	$	$
Before Confederation	21,152,933	98,378	–	–	–	21,251,311	–
1868-1910	76,388,584	6,465,248	1,594,241	11,695,311	9,488,903	105,632,287	14,156,391
1911	2,349,474	440,270	103,398	511,306	471,530	3,875,978	221,138
1912	2,560,939	442,012	109,651	585,900	555,710	4,254,212	263,717
1913	2,259,257	331,987	121,371	605,248	535,136	3,852,999	307,568
1914	2,829,661	389,285	147,729	642,845	574,039	4,583,559	380,188
1915	5,490,796	444,730	140,236	675,771	562,599	7,314,132	427,763
1916	6,142,149	397,665	139,952	697,532	529,565	7,906,863	446,722
1917	4,304,589	399,414	137,907	700,022	486,168	6,028,100	461,423
1918	1,781,957	111,553	149,859	743,857	540,331	3,327,557	414,868
1919	2,211,935	164,046	156,558	733,091	698,878	3,964,508	387,655
1920	4,579,565	798,113	157,886	745,986	713,335	6,994,885	441,926
1921	5,449,962	1,193,143	192,875	815,979	920,993	8,572,952	365,941
1922	4,482,639	836,810	209,201	983,042	1,105,054	7,616,746	804,516
1923	4,995,184	564,242	204,536	924,217	859,839	7,548,018	742,404
1924	6,747,395	479,900	204,653	980,094	942,056	9,354,098	897,412
1925	10,619,903	458,791	187,579	959,516	853,076	13,078,865	907,650
1926	12,024,461	501,449	182,376	1,046,568	873,682	14,628,536	920,900
1927	13,845,684	451,880	153,776	1,129,040	858,473	16,438,853	961,694
1928	13,762,905	418,719	175,818	1,212,721	1,150,241	16,720,404	1,355,677
1929	13,164,582	300,292	163,804	1,219,135	1,027,685	15,875,498	1,230,333
1930	9,324,221	348,517	200,721	1,157,353	1,105,386	12,136,198	1,043,647
1931	9,846,011	786,941	180,106	1,495,796	1,237,141	13,545,995	1,026,670
1932	8,521,041	344,389	150,591	1,496,594	1,064,022	11,576,637	976,845
Totals	**244,835,827**	**17,167,774**	**5,164,824**	**31,756,924**	**27,153,842**	**326,079,191**	**29,143,048**

[1] The income account is of expenditure on buildings and permanent improvements; the revenue account is of expenditure on maintenance only.

43.—Capital Expenditures for Construction and Enlargement of Canals to Mar. 31, 1932.

Canal.	Expenditure, Fiscal Year 1932.	Total Expenditure.	Canal.	Expenditure, Fiscal Year 1932.	Total Expenditure.
	$	$		$	$
Carillon and Grenville[1]	–	4,191,757	St. Lawrence Ship Canal	–	133,897
Ste. Anne Lock and Canal	–	1,320,216	St. Peters	–	648,547
Chambly	–	780,996	Rideau	(Cr.) 51	4,214,213
St. Ours Lock	309,478	704,217	Tay	–	489,599
Lachine	–	14,007,978	Murray	–	1,248,947
Lake St. Louis	–	298,176	Trent	–	19,953,626
Beauharnois	–	1,636,029	Welland	(Cr.) 201	29,903,398
Soulanges	–	7,899,945	Welland Ship Canal	3,496,489[2]	125,980,223
Lake St. Francis	–	75,907	Sault Ste. Marie	–	4,935,809
Cornwall	–	7,245,804	Culbute Lock and Dam	–	382,391
Williamsburg	–	1,334,552	Canals, general	–	34,967
Farran's Point	–	877,090	Prescott Elevator	4,715,326	4,715,326
Galops	–	6,143,468			
Rapide Plat	–	2,159,881	**Totals**	**8,521,041**	**244,835,827**
St. Lawrence River—					
North Channel	–	1,995,143			
River Reaches	–	483,830			
Galops Channel	–	1,039,895			

[1] The records relating to cost of construction by the Imperial Government were destroyed by fire in 1852 and the statistics prior to that year are not included in this table.

[2] Including $506,764 charged to Unemployment and Farm Relief Continuance Act.

Section 2.—Canal Traffic.

Tables **44** to **49** deal with the traffic passing through Canadian canals in recent years up to and including 1932. In this latest year the total traffic amounted to 17,960,650 tons, which was an increase of 1,771,576 tons from the total for 1931.

The increase in total traffic through Canadian canals was all through the Sault Ste. Marie, Welland, St. Lawrence and St. Andrews canals. Although the traffic through the canals at Sault Ste. Marie decreased by 24,122,156 tons, the percentage and also the total tonnage using the Canadian lock increased. By the summer of 1931, the new Welland Ship Canal was advanced sufficiently to allow vessels drawing up to 18 feet of water to pass through and, at the opening of navigation in 1932, the allowable draught was increased to 20 feet for the large upper-lake vessels. Later in the season vessels drawing 20½ feet and with cargoes up to 15,900 tons used the canal. Iron ore, which had previously been shipped by rail from Point Edward to Hamilton, was shipped through from Lake Superior to Hamilton by water, and increased quantities of coal and other commodities were shipped through the canal.

For details of traffic handled through each canal, see the annual report on Canal Statistics published by the Bureau of Statistics.

44.—Total Traffic through Canadian Canals, navigation seasons 1900-32, by Nationality of Vessels and Origin of Freight.[1]

NOTE.—For Canadian canal traffic from 1886 to 1899, see 1902 Year Book, p. 398.

Navigation Season.	Canadian Vessels.		United States Vessels.		Freight Carried.				
					Originating in Canada.		Originating in United States.		Total.
	No.	Registered Tonnage.	No.	Registered Tonnage.	Tons.	P.C. of Total.	Tons.	P.C. of Total.	Tons.
1900..	21,755	4,129,250	5,502	2,408,985	–	–	–	–	5,013,693
1901..	20,860	3,980,264	5,634	2,482,274	–	–	–	–	5,665,259
1902..	22,198	4,485,695	6,433	4,086,439	–	–	–	–	7,513,197
1903..	23,767	5,212,832	6,695	4,236,475	–	–	–	–	9,213,817
1904..	21,851	4,772,100	6,253	3,655,905	–	–	–	–	8,256,236
1905..	23,726	5,191,191	7,085	5,096,241	–	–	–	–	9,371,744
1906..	25,498	5,526,321	7,319	5,685,315	–	–	–	–	10,523,185
1907..	28,833	6,328,911	9,328	11,604,834	–	–	–	–	20,543,639
1908..	29,040	6,780,789	7,489	8,521,139	5,012,147	28·6	12,490,673	71·3	17,502,820
1909..	22,507	7,811,578	9,996	16,459,322	7,378,057	21·8	26,342,691	78·2	33,720,748
1910..	25,337	8,931,790	11,462	21,777,297	7,883,614	18·3	35,106,994	81·7	42,990,608
1911..	25,585	9,172,192	10,370	18,231,622	7,792,907	20·5	30,237,446	79·5	38,030,353
1912 .	27,371	10,237,335	11,785	24,636,190	9,376,529	19·7	38,210,716	80·3	47,587,245
1913	28,654	12,078,041	10,739	24,238,788	11,130,875	21·3	40,923,038	78·7	52,053,913
1914[2]..	26,125	12,050,856	7,742	15,636,414	9,382,206	25·3	27,641,031	74·7	37,023,237[2]
1915..	21,575	9,398,207	6,415	7,385,101	6,789,423	44·7	8,409,380	55·3	15,198,803
1916..	23,002	9,839,029	6,800	10,660,839	7,486,962	31·7	16,096,529	68·3	23,583,491
1917..	21,588	9,831,694	6,594	10,259,772	5,964,369	26·8	16,274,566	73·2	22,238,935
1918..	18,909	7,800,972	6,791	9,616,200	3,369,477	17·8	15,514,142	82·2	18,883,619
1919[3]..	20,682	8,735,973	4,092	5,259,173	4,865,831	48·7	5,129,435	51·3	9,995,266[3]
1920..	23,038	8,521,643	3,826	3,838,890	4,094,044	46·9	4,641,339	53·1	8,735,383
1921..	25,720	10,079,388	2,969	2,330,178	4,562,028	48·5	4,844,993	51·5	9,407,021
1922..	26,217	11,059,261	3,735	3,165,054	6,273,227	62·1	3,752,828	37·9	10,026,055
1923..	27,112	13,013,970	3,399	3,325,809	7,637,485	68·2	3,561,949	31·8	11,199,434
1924..	27,467	13,988,909	3,233	2,821,177	8,857,177	68·8	4,011,920	31·2	12,869,097
1925 .	28,361	14,964,785	3,587	3,824,924	9,570,311	67·7	4,560,356	32·3	14,130,667
1926..	27,965	14,542,485	3,543	3,144,866	9,656,190	71·7	3,821,473	28·3	13,477,663
1927..	36,162	17,472,601	4,013	3,364,461	11,863,931	67·8	5,624,380	32·2	17,488,311
1928..	30,575	17,435,176	3,973	3,270,591	13,882,592	74·2	4,387,849	25·8	18,720,441
1929..	25,917	13,741,071	2,400	2,323,351	9,689,718	70·7	4,009,929	29·3	13,699,647
1930 .	24,100	14,489,045	2,063	1,684,576	10,955,113	74·0	3,848,221	26·0	14,803,334
1931..	25,830	15,869,553	1,821	1,749,231	11,433,737	70·6	4,755,337	29·4	16,189,074
1932..	19,854	15,255,970	2,061	2,681,078	13,242,773	73·7	4,717,877	26·3	17,960,650

[1] Figures include duplication where cargoes use two or more canals.
[2] Third lock of United States Sault Ste. Marie canal opened Oct. 21, 1914.
[3] Fourth lock of United States Sault Ste. Marie canal opened Sept. 18, 1919.

45.—Distribution of Total Freight Traffic on Canals, by Months, navigation seasons 1926-32.[1]

Month.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.
January	–	541	535	–	–	–	–
April	–	673,811	111,161	711,312	294,038	859,121	912,999
May	1,691,689	2,426,701	2,452,368	2,155,653	2,023,657	2,676,774	2,235,860
June	2,309,478	2,497,073	2,583,737	2,165,033	1,966,064	2,243,120	2,346,107
July	2,123,356	1,975,204	2,621,168	1,875,862	2,155,723	1,987,980	2,273,578
August	1,710,017	2,468,196	2,843,453	1,899,269	2,319,748	2,080,946	2,439,664
September	1,880,044	2,596,336	2,502,805	1,775,010	2,226,704	2,066,567	2,687,235
October	2,039,909	2,646,216	2,792,983	1,759,939	2,170,635	2,064,330	2,578,860
November	1,522,764	2,022,010	2,540,168	1,258,485	1,493,992	2,012,871	2,232,162
December	200,406	182,223	272,063	99,084	152,773	197,365	254,185
Totals[1]	**13,477,663**	**17,488,311**	**18,720,441**	**13,699,647**	**14,803,334**	**16,189,074**	**17,960,650**

[1] Figures include duplications where cargoes use two or more canals.

46.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1931 and 1932.[1]

Year and Canal.	Agricultural Products.	Animal Products.	Manufactures.	Forest Products.	Mine Products.	Total.
1931.	tons.	tons.	tons.	tons.	tons.	tons.
Sault Ste. Marie	1,650,677	216	316,376	35,463	216,835	2,219,567
Welland	3,160,564	2,049	1,191,813	349,557	2,569,903	7,273,886
St. Lawrence	2,939,504	9,641	1,154,906	482,069	1,450,860	6,036,980
Chambly	2,353	63	600	12,542	34,778	50,336
St. Peters	3,020	1,157	3,111	20,933	19,307	47,528
Murray	–	–	5	6	878	889
Ottawa	690	1,539	82,430	18,399	389,861	492,919
Rideau	360	901	25,213	914	133	27,521
Trent	119	21	1,059	21,195	778	23,172
St. Andrews	20	243	795	7,813	7,405	16,276
Totals[1]	**7,757,307**	**15,830**	**2,776,308**	**948,891**	**4,690,738**	**16,189,074**
1932.						
Sault Ste. Marie	1,814,139	530	338,560	24,113	159,859	2,337,201
Welland	4,122,825	333	1,722,081	313,340	2,378,881	8,537,460
St. Lawrence	3,676,089	11,241	1,539,464	413,361	1,053,645	6,693,800
Chambly	1,180	85	8,000	3,083	17,002	29,350
St. Peters	5,891	936	5,452	13,478	15,074	40,831
Murray	–	–	400	24	–	424
Ottawa	732	767	92,531	7,365	152,128	253,523
Rideau	309	440	23,279	587	1,075	25,690
Trent	89	17	772	3,644	667	5,189
St. Andrews	23	280	1,395	24,892	10,592	37,182
Totals[1]	**9,621,277**	**14,629**	**3,731,934**	**803,887**	**3,788,923**	**17,960,650**

[1] Figures include duplications where cargoes use two or more canals.

47.—Principal Articles Carried through Canadian Canals, navigation seasons 1929-32.[1]

Article.	1929.	1930.	1931.	1932.	Increase in 1932.	Decrease in 1932.
	tons.	tons.	tons.	tons.	tons.	tons.
Barley	845,346	421,940	1,098,192	617,255	–	480,937
Buckwheat	–	5	36	1	–	35
Corn	127,398	132,532	166,930	445,151	278,221	–
Oats	514,784	249,264	585,658	428,181	–	157,477
Rye	125,574	126,169	87,106	537,968	450,862	–
Flaxseed	51,360	61,453	64,211	60,544	–	3,667
Beans	37	1	5	32,281	32,276	–
Wheat	3,905,653	5,400,500	4,842,445	6,622,237	1,799,792	–
Flour	532,984	583,488	826,373	176,457	–	49,916
Hay	21,827	8,764	3,794	2,313	–	1,481

See end of table, next page, for footnote.

47.—Principal Articles Carried through Canadian Canals, navigation seasons 1929-32[1]—concluded.

Article.	1929.	1930.	1931.	1932.	Increase in 1932.	Decrease in 1932.
	tons.	tons.	tons.	tons.	to.1s.	tons.
Other milled products	88,084	55,113	73,016	84,749	11,733	–
Fruits and vegetables	12,758	8,376	7,055	5,248	–	1,807
Potatoes	2,870	2,587	2,486	8,892	6,406	–
Live stock	506	424	390	250	–	140
Poultry, game and fish	3,115	1,863	1,637	1,900	263	–
Dressed meats	12	78	35	297	262	–
Other packing-house products	1,633	1,572	3,351	2,052	–	1,299
Hides and leather	624	303	10,417	10,130	–	287
Wool	506	316				
All other animal products	11,327	9,684				
Agricultural implements	14,408	3,932	1,743	3,776	2,033	–
Cement, bricks and lime	2,272	14,861	17,246	33,294	16,048	–
Household goods and furniture	585	844	503	234	–	269
Iron, pig and bloom	89,720	60,969	37,100	13,594	–	23,506
Iron and steel, all other	633,451	317,017	174,144	146,929	–	27,215
Gasolene	[2]	[2]	226,807	545,803	318,996	–
Petroleum and other oils	494,943	891,169	900,716	784,303	–	116,413
Sugar	323,126	306,183	403,351	438,612	35,261	–
Salt	21,560	23,232	35,196	49,739	14,543	–
Wines, liquors and beer	19,210	26,364	29,123	16,591	–	12,532
Merchandise not enumerated	1,020,118	1,003,082	950,379	1,415,033	464,654	–
Paper	[3]	[3]	200,472	284,026	83,554	–
Pulpwood	1,064,724	1,158,837	644,599	731,085	86,486	–
Sawn lumber	130,779	91,467	66,404	57,128	–	9,276
Squared timber	14,295	6,977	7,285	2,578	–	4,707
Shingles	1,218	3,904	2,117	1,162	–	955
Other woods	21,951	25,503	28,014	11,934	–	16,080
Hard coal	96,815	148,302	165,609	275,262	109,653	–
Soft coal	1,862,106	2,347,398	2,962,734	2,745,576	–	217,158
Coke	52,262	20,502	229,298	316,295	86,997	–
Copper ore	9,152	30,848	22,294	6,234	–	16,060
Iron ore	267,392	120,284	338,518	54,290	–	284,228
Other ore	36,120	86,072	32,372	3,534	–	28,838
Sand, etc.	1,277,042	1,051,155	939,913	387,732	–	552,181
Totals[1]	**13,699,647**	**14,803,334**	**16,189,074**	**17,960,650**	**1,771,576**[4]	–

[1] Figures include duplications where cargoes use two or more canals. [2] Included with petroleum and other oils. [3] Included with merchandise not enumerated. [4] Net increase.

48.—Canal Traffic, by Direction and Origin, navigation seasons 1931 and 1932.[1]

Year nad Canal.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
1931.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Sault Ste. Marie	284,064	1,717,729	2,875	41,815	14,014	21,931	113,132	24,007
Welland	544,522	2,961,981	253,080	30,487	174,510	296,354	15,041	2,997,911
St. Lawrence	1,393,002	3,058,746	297,227	10,299	20,770	13,840	81,076	1,162,020
Chambly	21,310	811	13,311	–	–	–	–	14,904
St. Peters	6,214	36,929	–	4,317	–	–	68	–
Murray	16	–	–	–	–	11	–	862
Ottawa	75,981	411,075	–	1,084	–	–	4,779	–
Rideau	23,337	4,184	–	–	–	–	–	–
Trent	10,240	12,932	–	–	–	–	–	–
St. Andrews	15,079	1,197	–	–	–	–	–	–
Totals[1]	**2,373,765**	**8,205,584**	**566,493**	**88,002**	**209,294**	**332,136**	**214,096**	**4,199,704**

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[1] Figures include duplications where cargoes use two or more canals.

48.—Canal Traffic, by Direction and Origin, navigation seasons 1931 and 1932[1]—concluded.

Year and Canal.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1932.								
Sault Ste. Marie...	289,886	1,780,829	13,035	43,524	27,088	43,324	122,866	16,649
Welland..........	606,989	3,475,249	393,650	87,850	321,148	507,119	32,139	3,113,316
St. Lawrence......	1,488,448	3,405,595	352,951	40,147	104,642	34,371	252,995	1,014,651
Chambly..........	11,833	1,641	5,718	-	-	-	-	10,158
St. Peters.........	10,827	27,808	879	1,300	-	-	-	17
Murray............	400	-	-	24	-	-	-	-
Ottawa...........	84,159	165,529	-	2,567	-	-	1,268	-
Rideau............	22,652	3,038	-	-	-	-	-	-
Trent.............	2,598	2,591	-	-	-	-	-	-
St. Andrews.......	34,726	2,456	-	-	-	-	-	-
Totals[1]........	**2,552,518**	**8,864,736**	**766,233**	**175,412**	**452,878**	**584,814**	**409,268**	**4,154,791**

Year and Canal.	Total Traffic by Direction.		Origin of Cargo.		Total Cargo.	Increase (+) or Decrease (−) on Previous Year.
	Up.	Down.	Canada.	United States.		
	tons.	tons.	tons.	tons.	tons.	tons.
1931.						
Sault Ste. Marie............	414,085	1,805,482	2,057,552	162,015	2,219,567	+ 528,096
Welland....................	987,153	6,286,733	3,947,133	3,326,753	7,273,886	+ 1,185,976
St. Lawrence................	1,792,075	4,244,905	4,793,891	1,243,089	6,036,980	− 142,043
Chambly....................	34,621	15,715	35,432	14,904	50,336	− 49,662
St. Peters..................	6,282	41,246	47,460	68	47,528	− 12,445
Murray.....................	16	873	16	873	889	− 1,427
Ottawa.....................	80,760	412,159	485,284	7,635	492,919	− 48,014
Rideau.....................	23,337	4,184	27,521	-	27,521	− 689
Trent......................	10,240	12,932	23,172	-	23,172	− 613
St. Andrews................	15,079	1,197	16,276	-	16,276	− 73,439
Totals[1]..............	**3,363,648**	**12,825,426**	**11,433,737**	**4,755,337**	**16,189,074**	**+ 1,385,740**
1932.						
Sault Ste. Marie............	452,875	1,884,326	2,137,715	199,486	2,337,201	+ 117,634
Welland....................	1,353,926	7,183,534	5,055,515	3,481,945	8,537,460	+ 1,263,574
St. Lawrence................	2,199,036	4,494,764	5,668,797	1,025,003	6,693,800	+ 656,820
Chambly....................	17,551	11,799	13,992	15,358	29,350	− 20,986
St. Peters..................	11,706	29,125	40,814	17	40,831	− 6,697
Murray.....................	400	24	424	-	424	− 465
Ottawa.....................	85,427	168,096	252,255	1,268	253,523	− 239,396
Rideau.....................	22,652	3,038	25,690	-	25,690	− 1,831
Trent......................	2,598	2,591	5,189	-	5,189	− 17,983
St. Andrews................	34,726	2,456	37,182	-	37,182	+ 20,906
Totals[1]..............	**4,180,897**	**13,779,753**	**13,237,573**	**4,723,077**	**17,960,650**	**+ 1,771,576**

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[1] Figures include duplications where cargoes use two or more canals.

49.—Traffic through individual Canadian Canals, navigation seasons 1927-32.

NOTE.—For corresponding figures for 1920-24, see p. 636 of the 1925 Year Book and for 1925-26, p. 668 of the 1930 Year Book.

Canal and Year.	Canadian Vessels.		United States Vessels.		Total Passengers.	Total Freight Carried.
	No.	Registered Tonnage.	No.	Registered Tonnage.		
		tons.		tons.		tons.
Sault Ste. Marie—						
1927....................	2,818	3,269,942	421	1,214,782	34,483	1,470,551
1928....................	2,940	3,415,478	418	1,171,011	34,289	2,007,137
1929....................	3,145	3,401,058	440	1,475,774	33,357	2,374,119
1930....................	2,595	2,622,448	362	859,128	27,831	1,691,471
1931....................	2,864	3,195,482	230	611,128	20,626	2,219,567
1932....................	2,951	3,172,136	148	284,339	14,330	2,337,201

49.—Traffic through individual Canadian Canals, navigation seasons 1927-32—concluded.

Canal and Year.	Canadian Vessels.		United States Vessels.		Total Passengers.	Total Freight Carried.
	No.	Registered Tonnage.	No.	Registered Tonnage.		
		tons.		tons.		tons.
Welland—						
1927	6,504	5,811,180	1,150	1,039,417	–	7,247,459
1928	5,365	5,598,493	1,222	1,051,464	–	7,439,617
1929	3,842	3,835,740	551	450,910	–	4,769,866
1930	4,623	5,028,583	629	545,984	1,580	6,087,910
1931	4,942	6,076,320	868	942,973	6,887	7,273,886
1932	4,473	6,076,197	1,239	2,150,688	5,951	8,537,460
St. Lawrence—						
1927	13,860	7,370,693	1,110	960,201	87,567	7,912,952
1928	13,152	7,416,426	1,258	922,377	85,926	8,411,542
1929	10,368	5,470,265	513	307,175	71,405	5,718,651
1930	9,177	5,759,178	342	211,882	51,848	6,179,023
1931	10,257	5,685,318	265	167,981	43,866	6,036,980
1932	7,851	5,510,025	320	224,456	1,784	6,693,800
Chambly—						
1927	541	67,402	870	107,370	609	204,536
1928	414	52,679	750	93,983	446	179,868
1929	397	55,559	569	67,869	318	123,077
1930	307	26,497	472	55,492	164	99,998
1931	327	23,311	194	16,259	158	50,336
1932	203	15,045	116	10,384	60	29,350
St. Peters—						
1927	903	58,840	19	5,345	302	46,306
1928	964	65,306	20	6,287	174	52,848
1929	909	69,689	27	4,749	370	49,650
1930	845	76,861	20	2,923	194	59,973
1931	871	69,849	22	4,270	126	47,528
1932	790	61,233	70	6,304	215	40,831
Murray—						
1927	440	104,893	141	10,724	8,339	712
1928	290	46,081	86	1,282	2,325	1,385
1929	301	37,316	148	2,747	–	4,875
1930	279	66,128	164	3,572	–	2,316
1931	302	70,988	180	3,879	60	889
1932	152	11,288	114	1,523	88	424
Ottawa—						
1927	3,017	553,140	193	23,055	27,565	455,759
1928	3,694	606,187	178	23,014	24,116	487,786
1929	3,509	652,730	106	12,209	22,995	537,037
1930	3,209	687,987	49	5,013	22,982	540,933
1931	3,111	618,807	24	1,984	24,648	492,919
1932	1,334	275,898	26	2,833	–	253,523
Rideau—						
1927	1,139	84,081	30	1,525	3,803	57,951
1928	936	78,368	19	685	1,441	51,999
1929	744	64,259	17	602	1,115	45,901
1930	506	51,104	11	348	785	28,210
1931	505	45,843	6	130	793	27,521
1932	439	42,895	11	216	613	25,690
Trent—						
1927	2,577	82,411	79	2,042	47,954	27,754
1928	2,456	81,899	22	488	39,291	36,311
1929	2,024	64,588	29	1,315	33,908	17,843
1930	1,712	54,614	14	234	26,989	23,785
1931	2,374	53,160	32	627	29,267	23,172
1932	1,325	35,509	17	335	21,027	5,189
St. Andrews—						
1927	350	70,019	–	–	262	64,331
1928	364	74,259	–	–	138	51,948
1929	678	89,867	–	–	1,084	58,628
1930	847	115,645	–	–	893	89,715
1931	277	30,475	–	–	202	16,276
1932	336	55,744	–	–	121	37,182
Totals[1]—						
1927	**32,149**	**17,472,601**	**4,013**	**3,364,461**	**210,884**	**17,488,311**
1928	**30,575**	**17,435,176**	**3,973**	**3,270,591**	**188,046**	**18,720,441**
1929	**25,917**	**13,741,071**	**2,400**	**2,323,350**	**164,552**	**13,699,647**
1930	**24,100**	**14,489,045**	**2,063**	**1,684,576**	**133,266**	**14,803,334**
1931	**25,830**	**15,869,553**	**1,821**	**1,749,231**	**126,633**	**16,189,074**
1932	**19,854**	**15,255,970**	**2,061**	**2,681,078**	**44,189**	**17,960,650**

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[1] Totals include duplications where vessels use two or more canals.

The Panama Canal.[1]—The Panama canal, which was opened to commercial traffic on Aug. 15, 1914, is a waterway which is destined to be of the greatest importance to the British Columbian ports, from which vessels now leave direct for Great Britain and European ports throughout the year. As an alternative route to that of the transcontinental railway lines, such a passage by water is of vital importance in the solution of the larger transportation problems of the continent, and while its influence is perhaps more potential than actual, such a check on transcontinental rail rates is a valuable one. During the War the great expectations based upon the opening of the canal were not realized, owing to the scarcity of shipping, but, with the post-war decline in ocean freight rates, an increase in traffic between our Pacific ports and Europe is occurring, and, while the proportion carried in vessels of Canadian registry is comparatively small, the cargo tonnage has nevertheless assumed considerable proportions. During the year ended June 30, 1932, as will be seen from Table **50**, a tonnage of 65,959 originating on our eastern coast and a total of 574,317 tons destined for our western coast were carried westward through the canal. The greater importance of the route as one from Pacific to Atlantic ports is illustrated by the 3,479,778 tons originating at western ports and 561,805 tons destined for eastern Canadian ports locked through in the same period. Strictly intercoastal Canadian cargo during the year aggregated 90,802 long tons. The canal is thus becoming an avenue of trade between Eastern and Western Canada.

The report of the Governor of the Panama Canal Zone for the year ended June 30, 1932, records a decrease from 1931 of from 5,529 to 4,506 in the number of transits, a decrease from 27,792,146 to 23,625,419 in canal net tonnage and decreases from $24,645,457 to $20,707,377 in tolls collected, and from 25,082,800 to 19,807,998 in tons of cargo carried (Table **51**).

With respect to traffic by nationality of vessels and cargo carried, vessels of United States registration carried 8,835,055 tons, or 44·6 p.c. of the total cargo of 19,807,998 tons locked through in the year 1932. British vessels carried 4,638,068 tons, or 23·4 p.c., Japanese vessels 1,031,704 tons, or 5·2 p.c., German vessels 1,078,738 tons, or 5·4 p.c. and Norwegian vessels 1,427,284 tons, or 7·2 p.c.

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[1] Revised, and figures supplied, by courtesy of the Governor of the Panama Canal Zone.

50.—Traffic to and from the East and West Coasts of Canada via the Panama Canal, years ended June 30, 1921-32.

Year.	Originating on—		Destined for—	
	Canada, West Coast.	Canada, East Coast.	Canada, West Coast.	Canada, East Coast.
	long tons.	long tons.	long tons.	long tons.
1921	125,638	39,561	126,414	16,558
1922	180,981	25,174	148,305	6,521
1923	604,546	92,939	101,588	125,283
1924	1,223,102	110,677	141,086	197,204
1925	1,082,282	121,803	158,709	379,284
1926	1,650,855	160,196	168,295	614,580
1927	1,548,783	207,003	248,009	803,418
1928	2,845,675	168,287	268,960	394,173
1929	2,578,982	202,522	226,810	510,475
1930	1,947,277	261,532	179,242	189,349
1931	3,525,133	110,924	967,100	517,410
1932	3,479,778	65,959	574,317	561,805

51.—Summary of Commercial Traffic through the Panama Canal, years ended June 30, 1915-32.

Year.	Atlantic to Pacific.		Pacific to Atlantic.		Total Traffic.	
	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.
	No.	long tons.	No.	long tons.	No.	long tons.
1915	522	2,070,993	553	2,817,461	1,075	4,888,454
1916	396	1,369,019	362	1,725,095	758	3,094,114
1917	874	2,929,260	929	4,129,303	1,803	7,058,563
1918	915	2,639,300	1,154	4,892,731	2,069	7,532,031
1919	857	2,740,254	1,167	4,176,367	2,024	6,916,621
1920	1,180	4,092,516	1,298	5,281,983	2,478	9,374,499
1921	1,471	5,892,078	1,421	5,707,136	2,892	11,599,214
1922	1,509	5,495,934	1,227	5,388,976	2,736	10,884,910
1923	2,125	7,086,259	1,842	12,481,616	3,967	19,567,875
1924	2,740	7,860,100	2,490	19,134,610	5,230	26,994,710
1925	2,413	7,398,397	2,260	16,560,439	4,673	23,958,836
1926	2,760	8,037,097	2,437	18,000,351	5,197	26,037,448
1927	2,888	8,583,327	2,587	19,164,888	5,475	27,748,215
1928	3,384	8,310,134	3,072	21,320,575	6,456	29,630,709
1929	3,348	9,882,520	3,065	20,780,486	6,413	30,663,006
1930	3,135	9,475,725	3,050	20,554,507	6,185	30,030,232
1931	2,804	6,680,429	2,725	18,402,371	5,529	25,082,800
1932	2,344	5,635,358	2,162	14,172,640	4,506	19,807,998

PART IX.—SHIPPING AND NAVIGATION.

Canadian shipping may be divided into three classes: (1) ocean or sea-going shipping; (2) inland or rivers and lakes international shipping; and (3) coasting trade or coastwise shipping. Ocean shipping covers the sea-going vessels arriving or departing from Atlantic and Pacific Coast ports, including St. Lawrence River ports up to Montreal. Inland international shipping is the term used to cover shipping between Canadian and United States ports on the Great Lakes and international rivers and on lakes and rivers accessible to shipping from United States ports such as the Ottawa, Rideau, Trent, etc. (Ferriage is, however, excluded from this and other classes of shipping.) Coastwise shipping or the coasting trade covers shipping between one Canadian port and another on the Atlantic coast, on the Pacific coast and on the inland international lakes and rivers or lakes and rivers accessible to them. It does not, however, include shipping on isolated Canadian waterways such as the Mackenzie river, lake Winnipeg, lake St. John, etc.

Whereas, in the case of most countries of such extensive coast line, the ocean shipping is much the more important, in Canada, the shipping on inland waters, while finally dependent to a large extent on ocean traffic to foreign ports, shares, almost equally with that on the Atlantic and Pacific oceans, the attention devoted to water traffic. The Great Lakes are among the leading highways of the international trade of the world; consequently, the statistics of inland international shipping are included with those of sea-going shipping in Table **52**, while those of sea-going shipping alone will be found in Table **53**.

Tables **52-60**, following, have been compiled or revised from the Shipping Report of the Department of National Revenue for the fiscal year ended Mar. 31, 1932.

52.—Sea-going and Inland Vessels (exclusive of Coasting Vessels and Ferriage) Arrived at and Departed from Canadian Ports, fiscal years ended June 30, 1901-06, and Mar. 31, 1907-32.

NOTE.—For the years 1868-1900, see Canada Year Book, 1911, p. 380.

Fiscal Year.	British.		Canadian.		Foreign.		Total Tonnage.
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	
1901	4,319	6,694,133	30,211	8,540,089	33,302	10,795,586	26,029,808
1902	4,363	6,865,924	33,202	9,654,528	40,148	13,504,952	30,025,404
1903	4,647	7,753,788	31,534	10,482,940	53,545	15,418,315	33,655,043
1904	4,997	8,045,817	30,934	9,955,290	35,739	13,201,098	31,202,205
1905	4,614	8,034,652	29,729	11,047,447	35.647	13,195,721	32,277,820
1906	5,104	9,059,453	32,239	11,241,915	37,644	14,430,804	34,732,172
1907 (9 mos.)	4,488	7,576,721	30,654	11,582,409	25,263	11,436,761	30,595,891
1908	6,356	10,329,515	28,795	11,717,846	40,461	17,527,670	39,575,031
1909	5,795	10,405,370	29,247	13,805,790	38,677	16,490,443	40,701,603
1910	5,780	11,038,709	28,635	15,680.534	41,650	17.848.748	44,567,991
1911	6,870	12,712,337	29,670	16,380,146	40,892	18,337,062	47,429,545
1912	6,766	13,342,929	27,949	18,069,983	45,399	21,560,215	52,973,127
1913	7,307	13,896,353	42,624	20,677,938	47.303	23,275,492	57,849,783
1914	7,418	15,711,849	30,234	17,026,121	55,835	29,181,513	61,919,483
1915	6,949	13,931,091	29,359	17,504,751	48,635	22,168,311	53,604,153
1916	6,817	12,417,944	37,900	17,372,836	75,411	27,930,318	57,721,098
1917	7,387	16,144,873	39,978	20,290,252	74,850	29,277,419	65,712,544
1918	7,337	16,959,790	34,786	19,890,461	70,781	29,952,237	66,802,488
1919	6,099	14,054,166	37,023	17,567,061	52,273	21,607,821	53,229,048
1920	5,511	12,320,994	37,388	16,869,619	52,827	20,302,920	49,493,533
1921	4,526	10,545,619	39,877	22,236,692	50,370	21,866,049	54,648,630
1922	4,239	10,471,403	36,679	20,029,572	61,114	26,164,278	56,665,253
1923	4,869	13,868,905	59,364	26,423,287	87,199	32,110,991	72,403,183
1924	5,187	15,158,994	53,945	28,216,588	80,700	31,571,791	74,947,373
1925	5,763	16,463,204	44,432	26,620,979	84,084	34,854,868	77,939,051
1926	6,515	17,749,067	34,010	23,149,028	55,109	34,348,732	75,246,827
1927	6,448	18,117,525	34,015	25,692,591	62,344	33,521,543	77,331,659
1928	6,253	18,738,027	38,497	28,453,951	67,771	36,611,819	83,803,797
1929	6,400	21,625,660	39,038	29,792,258	75,745	42,317,309	93,735,227
1930	5,634	20,171,383	40,251	29.137,798	107,925	40,129,608	89,438,789
1931	5,826	20,008,005	33,877	29,541,844	83,383	41,362,027	90,911,876
1932	5,754	19,025,391	30,978	27,683,791	72,577	36,727,215	83,436,397

Section 1.—Ocean Shipping.

Canadian ocean shipping dates back to the days of early European fishermen who frequented the shores of Newfoundland and the Maritime Provinces. Ocean-going vessels of that time were crude wooden sailing craft of but 20 or 30 tons burden, to be entrusted only to skilful and hardy mariners for navigation through little known seas. Later on exploration and settlement produced a larger volume of traffic, but it was not until the building of ships in Canada by the French assumed some dimensions that traffic became important. The first ocean-going vessels in Canada were probably built by Pont-Gravé, one of the first settlers in New France, and soon afterwards Talon and Hocquart, intendants of the colony, realizing the advantages offered to the industry by the timber resources available, gave it every encouragement. Shipyards were established at Quebec and other points along the St. Lawrence, and these, together with later establishments in the Maritime Provinces and on the western coast, have formed the principal bases of Canadian shipping on the Atlantic and the Pacific.

Canadian shipping attained some prominence in the days of fast wooden sailing vessels, and also at a later date when steam power first came into use. In 1833 the *Royal William*, a Canadian ship built to ply between Quebec and Halifax, crossed the Atlantic from Pictou to London, the first vessel to navigate the Atlantic under steam power. A few years later Samuel Cunard established the well-known steam-ship line of that name. His company pursued a conservative course; wooden ships were used long after iron hulls were a proven success, and paddle wheels after the introduction of the screw propeller. By 1867 the company's business had shifted to New York and its terminal was moved thither from Halifax. The Allan line had a somewhat similar early history but remained a purely Canadian company. In addition to other lines of less importance, both the C.P.R. and the Dominion Government operate fleets on the Atlantic and the Pacific oceans.

In the following tables statistics are given of sea-going vessels entered and cleared at Canadian ports during the fiscal years from 1901 to 1932 (Table **53**); of the nationalities, tonnages of freight carried, and numbers of crews of vessels entered and cleared at Canadian ports in the fiscal years ended 1931 and 1932 (Table **54**); of entrances and clearances of sea-going and all ships at principal ports (Table **59**); and of the countries whence arrived and to which departed (Table **55**). The numbers and particularly the tonnages of vessels entered and cleared at Canadian ports, in both ocean and coasting trade, indicate clearly the predominance of British and Canadian shipping over that of all other nations. This is particularly the case on the Atlantic coast, where the bulk of our European and South American trade is handled. The figures in Table **53** show a significant and fairly steady expansion in the total of ocean shipping through Canadian ports since the beginning of the century, with a relatively slight decline in the latest year.

53.—Sea-going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, fiscal years ended June 30, 1901-06, and Mar. 31, 1907-32.

NOTE.—For corresponding figures for the years 1868-1900, see Canada Year Book, 1911, p. 379.

Fiscal Year.	British.		Canadian.		Foreign.		Total Tonnage.
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	
1901	4,319	6,694,133	9,910	1,677,138	12,476	6,171,791	14,543,062
1902	4,363	6,865,924	11,413	1,937,227	14,530	5,928,237	14,731,488
1903	4,647	7,753,788	11,282	2,085,568	12,403	6,001,819	15,841,175
1904	4,997	8,045,817	11,045	1,979,803	14,002	5,801,085	15,826,705
1905	4,614	8,034,652	11,279	2,269,834	11,904	5,283,969	15,588,455
1906	5,104	9,059,453	12,201	2,304,942	12,511	5,479,034	16,843,429
1907 (9 mos.)	4,488	7,576,721	7,880	1,899,141	8,107	4,429,012	13,904,874
1908	6,356	10,329,515	10,562	2,606,660	12,886	6,555,096	19,491,271
1909	5,795	10,405,370	10,946	2,806,278	13,441	6,554,228	19,765,876
1910	5,780	11,038,709	10,875	3,498,361	13,147	6,267,243	20,804,313
1911	6,870	12,712,337	10,607	3,341,998	12,467	6,242,851	22,297,186
1912	6,766	13,342,929	10,966	4,618,163	15,134	6,628,513	24,589,605
1913	7,307	13,896,353	11,810	4,530,835	16,549	7,803,910	26,231,098
1914	7,418	15,711,849	12,786	5,160,799	15,811	8,695,838	29,568,486
1915	6,949	13,931,091	11,903	4,005,011	15,060	7,466,484	25,402,586
1916	6,817	12,417,944	12,386	3,894,731	18,559	8,514,975	24,827,650
1917	7,387	16,144,873	12,241	4,343,448	18,500	8,778,753	29,267,074
1918	7,337	16,959,790	10,998	4,343,853	16,597	11,483,484	32,787,127
1919	6,099	14,054,166	11,115	3,758,528	15,132	7,448,699	25,261,393
1920	5,511	12,320,994	11,994	4,434,634	17,353	8,489,126	25,244,754
1921	4,526	10,545,619	12,490	5,510,484	17,624	8,860,626	24,916,729
1922	4,239	10,471,403	14,929	6,861,202	17,170	10,261,865	27,594,470
1923	4,869	13,868,905	16,693	7,463,809	17,493	12,945,623	34,278,337
1924	5,187	15,158,994	16,778	7,698,045	16,795	14,161,363	37,018,402
1925	5,763	16,463,204	17,779	7,966,193	17,314	16,551,629	40,981,026
1926	6,515	17,749,067	17,906	9,703,054	18,117	18,202,875	45,654,996
1927	6,448	18,117,525	16,746	8,926,138	19,111	19,106,106	46,149,769
1928	6,253	18,738,027	16,716	9,021,264	18,561	20,455,343	48,214,634
1929	6,400	21,625,660	18,005	9,235,036	21,021	23,547.831	54,408,527
1930	5,634	20,171,383	18,145	9,673,948	19,689	23,146,901	52,992,232
1931	5,826	20,008,005	17,865	11,707,129	17,906	22,885,015	54,600,149
1932	5,754	19,025,391	15,919	11,808,667	16,604	21,506,183	52,340,241

54.—Details, by Nationality, of Sea-going Vessels (exclusive of Coasting Vessels) Entered and Cleared at Canadian Ports, fiscal years ended Mar. 31, 1931 and 1932.

Nationality.	Number of Vessels.	Tons Register.	Freight.		Number of Crew.
			Tons Weight.	Tons Measurement.	
1931.					
ENTERED.					
British	2,962	10,746,965	2,671,576	272,269	271,623
Canadian	8,904	6,066,752	1,330,623	23,754	240,860
Foreign	8,871	11,251,045	3,461,880	54,013	265,214
Totals	**20,737**	**28,064,762**	**7,464,079**	**350,036**	**777,697**
CLEARED.					
British	2,864	9,261,040	3,984,518	501,785	224,945
Canadian	8,961	5,640,377	920,508	166,657	227,008
Foreign	9,035	11,633,970	4,830,537	437,531	271,950
Totals	**20,860**	**26,535,387**	**9,735,563**	**1,105,973**	**723,903**
TOTALS, ENTERED AND CLEARED.					
British	5,826	20,008,005	6,656,094	774,054	496,568
Canadian	17,865	11,707,129	2,251,131	190,411	467,868
Foreign	17,906	22,885,015	8,292,417	491,544	537,164
Totals	**41,597**	**54,600,149**	**17,199,642**	**1,456,009**	**1,501,600**
1932.					
ENTERED.					
British	2,925	10,164,943	1,919,791	203,342	227,837
Canadian	7,944	6,082,973	1,681,806	35,150	221,094
Foreign	8,306	10,755,294	2,965,093	15,733	240,685
Totals	**19,175**	**27,003,210**	**6,566,690**	**254,225**	**689,616**
CLEARED.					
British	2,829	8,860,448	4,324,046	304,030	200,640
Canadian	7,975	5,725,694	686,480	167,128	200,683
Foreign	8,298	10,750,889	4,677,342	539,990	241,174
Totals	**19,102**	**25,337,031**	**9,687,868**	**1,011,148**	**642,497**
TOTALS, ENTERED AND CLEARED.					
British	5,754	19,025,391	6,243,837	507,372	428,477
Canadian	15,919	11,808,667	2,368,286	202,278	421,777
Foreign	16,604	21,506,183	7,642,435	555,723	481,859
Totals	**38,277**	**52,340,241**	**16,251,558**	**1,265,373**	**1,332,113**

55.—Sea-going Vessels Entered and Cleared, by Principal Countries, fiscal year ended Mar. 31, 1932.

VESSELS ENTERED INWARDS.

Country.	British.			Canadian.			Foreign.		
	No. of Vessels.	Tons Register.	Crew, No.	No. of Vessels.	Tons Register.	Crew, No.	No. of Vessels.	Tons Register.	Crew, No.
Whence Arrived—									
Great Britain	928	5,321,086	109,039	23	62,016	769	162	288,624	4,212
Australia	37	250,010	5,824	18	65,368	733	4	13,965	138
British South Africa	29	102,722	1,422	–	–	–	8	26,505	294
British West Indies	27	41,617	671	166	460,124	10,242	152	198,484	3,722
Newfoundland	598	424,051	15,941	264	166,048	5,997	144	201,451	3,273
New Zealand	9	62,589	1,431	1	3,260	42	6	21,841	204
Hong Kong	25	256,217	8,250	7	61,805	3,686	7	44,302	870
Other Br. possessions	33	120,100	1,992	–	–	–	21	72,500	839
Argentina	1	2,182	30	15	54,120	669	24	82,826	818
Belgium	56	429,744	10,014	–	–	–	74	256,343	3,113
China	32	144,014	2,983	5	44,227	2,583	61	227,277	3,268
Colombia	7	30,802	255	39	218,180	1,671	3	12,150	99
Cuba	–	–	–	1	1,460	28	2	1,986	40
Denmark	–	–	–	–	–	–	24	146,514	4,172
France	11	72,783	1,503	–	–	–	47	181,253	3,602
Germany	27	225,101	5,416	–	–	–	109	513,362	9,648
Greece	–	–	–	–	–	–	3	9,318	94
Holland	29	153,476	1,522	–	–	–	80	339,130	4,170
Italy	5	15,352	160	–	–	–	50	207,805	2,500
Japan	45	299,581	7,360	19	136,015	7,103	256	1,130,351	15,926
Mexico	2	7,368	80	10	349	56	–	–	–
Norway	–	–	–	–	–	–	8	23,898	270
Peru	9	64,778	364	19	105,692	813	5	24,087	179
St. Pierre and Miquelon	184	13,134	1,620	159	29,548	1,844	28	18,055	550
Spain	3	8,159	95	–	–	–	8	8,190	250
Sweden	–	–	–	–	–	–	44	179,641	4,205
United States	442	1,979,589	46,645	5,158	4,564,672	166,870	5,651	6,311,241	159,240
Sea Fisheries	235	7,286	1,955	1,962	71,015	17,162	1,248	64,527	12,812
From Sea	120	23,104	1,936	68	5,141	511	30	5,989	333
Totals[1]	**2,925**	**10,161,943**	**227,837**	**7,944**	**6,082,973**	**221,091**	**8,306**	**10,755,294**	**240,685**

VESSELS CLEARED OUTWARDS.

Country.	British.			Canadian.			Foreign.		
	No. of Vessels.	Tons Register.	Crew, No.	No. of Vessels.	Tons Register.	Crew, No.	No. of Vessels.	Tons Register.	Crew, No.
To which Departed—									
Great Britain	817	4,550,475	99,340	19	52,648	629	250	673,617	7,523
Australia	46	281,259	6,412	8	30,952	335	12	38,975	422
Hong Kong	18	187,037	5,989	7	61,805	3,644	7	32,701	366
British South Africa	6	25,054	296	1	4,485	55	8	26,992	304
British Guiana	–	–	–	51	183,962	4,114	25	35,829	674
British West Indies	35	66,136	2,533	133	322,399	7,236	110	143,143	2,812
Newfoundland	753	433,776	17,040	344	160,793	6,380	126	202,028	3,051
New Zealand	6	54,945	1,514	7	25,420	292	10	36,002	347
Other Br. possessions	30	107,138	1,629	–	–	–	36	112,176	1,267
Argentina	14	44,937	1,044	13	45,056	531	27	93,088	918
Belgium	37	147,954	1,990	–	–	–	50	159,679	2,133
China	36	161,216	3,230	5	48,155	2,562	45	213,268	3,699
Colombia	7	35,570	267	38	213,302	1,640	9	27,467	289
Cuba	2	4,172	86	8	15,166	489	40	75,622	1,846
Denmark	–	–	–	–	–	–	62	251,171	6,588
France	48	249,502	5,641	2	4,090	59	124	424,384	6,287
Germany	13	58,951	685	–	–	–	92	391,281	5,527
Greece	4	11,817	131	–	–	–	17	50,748	563
Holland	34	113,479	1,289	–	–	–	56	161,378	2,262
Italy	6	18,689	201	–	–	–	38	147,181	1,625
Japan	28	242,240	6,734	23	186,228	9,299	333	1,443,557	18,902
Mexico	3	123	19	22	5,483	159	2	5,861	64
Norway	–	–	–	–	–	–	19	60,535	853
Peru	5	34,594	301	14	81,301	511	7	20,715	230
St. Pierre and Miquelon	159	27,142	1,931	126	33,923	1,741	55	39,558	1,059
Spain	–	–	–	–	–	–	3	1,938	161
Sweden	–	–	–	–	–	–	43	227,412	6,057
United States	432	1,845,804	37,947	5,058	4,129,899	147,771	5,183	5,439,900	145,884
Sea Fisheries	252	8,802	2,303	2,058	75,652	12,620	1,402	78,019	17,384
For Sea	18	18,382	1,297	12	292	50	70	8,126	764
Totals[1]	**2,829**	**8,860,448**	**200,640**	**7,975**	**5,725,694**	**200,683**	**8,298**	**10,750,889**	**241,174**

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[1] Totals include other countries not specified.

Section 2.—Inland Shipping.

Inland shipping is associated in its beginning with the birch-bark canoe of the American Indian. The advantages of this light and easily navigable boat were realized by explorers and fur traders, and for many years it was in general use, giving way to more substantial craft only with the demands of heavier traffic. The *bateau* and Durham boat came into common use after the migration of the U.E. Loyalists but soon gave place to larger vessels on the St. Lawrence and the other main highways of the time. Original plans of the Lachine canal, calling for a width of 12 feet and a depth of 18 inches, afford an illustration of the size of these primitive craft.

In the absence of any roads to make land travel possible, the St. Lawrence river and the Great Lakes formed the main highway to the interior. The route from Montreal to the Upper Lakes was broken at three places—from Montreal to Kingston transportation was by *bateau* or Durham boat, from Kingston to Queenston schooners were used, then there was the portage road from Queenston to Chippawa and, finally, schooner again to the destination. The charge for transporting a barrel of rum from Montreal to Kingston was from $3 to $3.50, and freight charges on other goods were proportions of this standard rate.

In 1809, the *Accommodation*, the first Canadian steamship, was built for the Hon. John Molson, to run between Montreal and Quebec. By 1818 Molson had formed a company, the St. Lawrence Steamship Co. or the Molson Line. On lake Ontario, the *Frontenac* was used from 1817 on a weekly service between York and Prescott and, following this beginning, came a period of great activity in lake and river shipping. In 1845, the *Gore* reached lake Huron by way of the Welland canal to carry on transport trade on the Upper Lakes, where previously there had not been enough traffic to support a large ship. Shipping on the Upper Lakes became brisker now, for there were settlers to be carried from Buffalo to the western United States and grain to be brought back. In this period Canadian shipping made its profit by carrying American goods, for there was little traffic originating in the Canadian near-West.

Upon the advent of steam railways, water-borne traffic did not decrease but, on the contrary, increased, and at present the greater part of the western grain is shipped *via* the Great Lakes route to eastern ports. The iron ore and coal traffic between lake Superior and lake Erie ranges between 60 and 80 million short tons per annum; the total traffic on these upper lakes alone is greater than that carried by all Canadian railways and about one-twelfth of that carried by all United States railways.

Inland International Shipping.—Statistics of the inland international shipping between Canadian and United States ports for the fiscal years ended Mar. 31, 1928-32, exclusive of ferriage, are given in Table **56.** The total tonnages of inland international shipping entered and cleared in the fiscal years 1920-32, were as follows: 1920, 24,248,779; 1921, 29,731,901; 1922, 29,070,783; 1923, 38,124,846; 1924, 37,928,971; 1925, 36,958,025; 1926, 29,591,831; 1927, 31,181,890; 1928, 35,589,163; 1929, 39,326,700; 1930, 36,446,557; 1931, 36,311,727; 1932, 31,096,156.

56.—Canadian and United States Shipping on Rivers and Lakes between Canadian and United States Ports, exclusive of Ferriage, fiscal years ended Mar. 31, 1928-32.

Item.	1928.	1929.	1930.	1931.	1932.
Vessels Arrived—					
Canadian—					
Steam and motor....No.	9,946	9,677	9,285	7,294	6,984
Tons register....	8,689,990	9,496,259	9,183,401	8,666,392	7,504,571
Number of crew....	276,095	280,107	271,221	236,566	206,243
Sail....No.	330	270	1,276	519	210
Tons register....	101,618	57,077	72,227	64,877	64,468
Number of crew....	1,380	1,093	2,080	1,232	895
United States—					
Steam and motor....No.	23,769	26,261	42,989	32,229	27,823
Tons register....	7,609,732	8,921,588	8,010,012	8,783,219	7,515,197
Number of crew....	179,096	196,118	261,251	261,605	221,906
Sail....No.	1,028	1,112	1,192	621	247
Tons register....	344,292	512,827	284,945	255,202	131,977
Number of crew....	2,993	4,604	2,758	1,964	904
Description of vessels—					
Steam, screw....No.	12,818	25,395	39,806	29,740	25,398
Steam, paddle.... "	2,008	2,013	1,630	1,497	1,309
Steam, sternwheel.... "	9	9	9	9	9
Motor.... "	18,880	8,522	10,829	8,277	8,091
Sail.... "	97	83	43	257	70
Sail, barges.... "	1,261	1,298	2,425	883	387
Vessels Departed—					
Canadian—					
Steam and motor....No.	11,157	10,855	9,894	7,684	7,645
Tons register....	10,550,279	10,952,282	10,133,814	9,015,359	8,242,689
Number of crew....	282,831	297,325	283,083	240,683	215,660
Sail....No.	348	231	1,651	515	220
Tons register....	90,800	51,604	74,408	88,087	63,396
Number of crew....	1,453	843	2,496	1,370	944
United States—					
Steam and motor....No.	23,239	26,135	42,807	31,945	27,653
Tons register....	7,834,436	8,816,991	8,389,248	9,203,669	7,434,814
Number of crew....	195,173	212,840	263,265	259,674	220,222
Sail....No.	1,174	1,216	1,248	682	250
Tons register....	368,016	518,072	298,502	234,922	139,044
Number of crew....	3,342	5,210	2,932	2,027	895
Description of vessels—					
Steam, screw....No.	13,973	26,261	40,194	30,018	25,922
Steam, paddle.... "	1,989	1,997	1,715	1,484	1,291
Steam, sternwheel.... "	9	9	9	9	8
Motor.... "	18,425	8,723	10,783	8,118	8,077
Sail.... "	146	74	36	32	57
Sail, barges.... "	1,376	1,373	2,863	1,165	413

Section 3.—Coasting Trade.

Statistics of the arrivals and departures of the vessels engaged in the coasting trade of Canada, whether on the sea or the Great Lakes and international rivers, are given for the latest five years in Table 57. This statement does not include vessels plying on inland waterways inaccessible to international shipping nor does it include ferry services between one Canadian port and another.

57.—British and Foreign Vessels Employed in the Coasting Trade of Canada, fiscal years ended Mar. 31, 1928-32.

Item.	1928.	1929.	1930.	1931.	1932.
Vessels Arrived—					
British—					
Steam and motor.....No.	83,371	83,714	74,170	71,076	64,743
Tons register	40,893,914	43,810,823	39,332,171	43,444,698	41,697,387
Number of crew	1,777,703	1,656,274	1,552,640	1,567,482	1,416,113
Sail.....No.	10,798	10,574	7,364	5,828	4,477
Tons register	3,530,357	4,195,107	3,555,731	2,876,756	2,405,395
Number of crew	56,562	39,975	31,558	25,494	21,205
Foreign—					
Steam and motor.....No.	707	670	596	528	625
Tons register	924,691	1,019,911	763,632	796,098	802,634
Number of crew	15,740	15,765	13,746	12,593	12,690
Sail.....No.	105	89	75	75	30
Tons register	32,624	20,747	15,332	17,100	7,556
Number of crew	581	440	309	399	111
Description of vessels—					
Steam, screw.....No.	72,904	70,520	61,246	58,083	52,046
Steam, paddle.....“	2,994	2,560	2,292	1,750	1,519
Steam, sternwheel.....“	1,557	947	272	176	164
Motor.....“	6,623	10,357	10,956	11,595	11,639
Sail, ships.....“	5,938	5,101	3,204	2,565	1,958
Sail, barks.....“					
Sail, brigantines.....“					
Sail, schooners.....“					
Sail, sloops, barges, canal boats, etc.....“	4,965	5,562	4,235	3,338	2,549
Vessels Departed—					
British—					
Steam and motor.....No.	83,197	82,680	74,323	71,058	64,907
Tons register	40,008,995	43,076,773	39,653,349	43,813,306	42,010,810
Number of crew	1,763,783	1,741,032	1,556,378	1,611,737	1,449,780
Sail.....No.	10,530	10,460	7,195	5,639	4,541
Tons register	3,300,910	4,097,105	3,591,010	2,896,156	2,416,761
Number of crew	50,118	40,677	30,708	24,759	21,847
Foreign—					
Steam and motor.....No.	842	626	600	585	626
Tons register	813,315	809,051	808,220	816,330	875,335
Number of crew	16,793	15,085	12,915	14,042	13,900
Sail.....No.	145	139	79	72	38
Tons register	22,810	24,168	15,328	14,763	8,993
Number of crew	422	481	284	310	103
Description of vessels—					
Steam, screw.....No.	72,754	69,474	61,214	58,176	51,979
Steam, paddle.....“	2,982	2,589	2,230	1,656	1,502
Steam, sternwheel.....“	1,551	955	323	176	164
Motor.....“	6,752	10,288	11,156	11,635	11,888
Sail, ships.....“	5,703	4,806	2,948	2,368	2,024
Sail, barks.....“					
Sail, brigantines.....“					
Sail, schooners.....“					
Sail, sloops, barges, canal boats, etc.....“	4,972	5,793	4,326	3,343	2,555

Section 4.—Grand Total Shipping Trade.

Statistics are given in Table 58 showing sea-going, inland international, coastwise and total vessels entered and cleared at Canadian ports, by provinces, during the fiscal year ended Mar. 31, 1932, and totals for the fiscal years 1923 to 1932. It is noteworthy in this table that the volume of coastwise shipping is the greatest, while sea-going is next in tonnage. In the period from 1923 to 1929, both sea-going and coastwise shipping showed marked expansion, but in recent years there has been some decline. Inland international shipping, on the other hand, has varied considerably from year to year without showing any definite trend. It is, however, significant of the importance of water-borne traffic on the inland rivers and lakes that the total tonnage of shipping entered and cleared was greater for Ontario than for any other province in the fiscal year ended 1930 and in the latest year, 1932, was only slightly below that of the Pacific Coast province. This was due to the fact that the great bulk of the inland international shipping was through Ontario ports, while there was also a large tonnage of coasting trade through these ports. Quebec came third in total shipping in 1932, followed by Nova Scotia and New Brunswick.

58.—Total Number and Tonnage of All Vessels Entered and Cleared at Canadian Ports, by Provinces, during the fiscal year ended Mar. 31, 1932, with Totals for the fiscal years ended 1923-32.

(Exclusive of ferriage.)

Province.	Sea-going.				Coastwise.			
	Arrived.		Departed.		Arrived.		Departed.	
	Vessels.	Tons Register.	Vessels.	Tons Register.	Vessels.	Tons Register.	Vessels.	Tons Register.
Prince Edward Island	110	73,555	139	105,090	892	302,907	870	276,795
Nova Scotia	4,365	5,400,684	4,687	5,640,351	13,359	3,783,649	13,458	3,703,159
New Brunswick	3,980	1,597,565	3,889	1,411,699	3,165	1,170,280	3,269	1,380,035
Quebec	1,445	5,930,902	1,300	4,895,199	8,909	9,127,094	8,883	9,785,727
Ontario	–	–	4	2,950	13,780	14,494,481	13,322	13,191,872
Manitoba	–	–	–	–	–	–	–	–
British Columbia	9,275	14,000,504	9,083	13,281,742	29,592	15,910,015	30,132	16,850,037
Yukon	–	–	–	–	178	124,546	178	124,274
Totals, 1932	**19,175**	**27,003,210**	**19,102**	**25,337,031**	**69,875**	**44,912,972**	**70,112**	**45,311,899**
Totals, 1931	**20,737**	**28,064.762**	**20,860**	**26,535,387**	**77,597**	**47,134,652**	**77,354**	**47,540,555**
Totals, 1930	**21,583**	**27,155,766**	**21,885**	**25,836,466**	**82,205**	**43,666,866**	**82,197**	**44,067,907**
Totals, 1929	**22,531**	**27,464,158**	**22,895**	**26,944,369**	**95,047**	**49,016,588**	**93,905**	**48,007,097**
Totals, 1928	**20,903**	**24,240,847**	**20,627**	**23,973,787**	**94,981**	**45,381,586**	**94,714**	**44,146,030**
Totals, 1927	**21,382**	**23,224,281**	**20,923**	**22,925,488**	**92,222**	**43,124,919**	**90,814**	**42,617,467**
Totals, 1926	**21,185**	**22,837,720**	**21,353**	**22,817,276**	**88,693**	**41,770,480**	**87,878**	**41,117,175**
Totals, 1925	**20,436**	**20,470,379**	**20,420**	**20,510,647**	**87,185**	**40,480,372**	**87,091**	**40,139,447**
Totals, 1924	**19,261**	**18,497,025**	**19,499**	**18,521,377**	**88,035**	**39,268,712**	**84,762**	**38,096,416**
Totals, 1923	**19,462**	**17,095,883**	**19,593**	**17,182,454**	**82,569**	**36,240,041**	**80,033**	**34,730,037**

Province.	Inland International.				Totals.			
Prince Edward Island	–	–	–	–	1,002	376,462	1,009	381,885
Nova Scotia	–	–	–	–	17,724	9,184,333	18,145	9,343,510
New Brunswick	–	–	–	–	7,145	2,767,845	7,158	2,791,734
Quebec	796	704,626	1,087	1,052,474	11,150	15,762,622	11,270	15,733,400
Ontario	34,393	14,502,629	34,606	14,819,112	48,173	28,997,110	47,932	28,013,934
Manitoba	–	–	–	–	–	–	–	–
British Columbia	60	2,535	60	2,535	38,927	29,913,054	39,275	30,134,314
Yukon	15	6,423	15	5,822	193	130,969	193	130,096
Totals, 1932	**35,264**	**15,216,213**	**35,768**	**15,879,943**	**124,314**	**87,132,395**	**124,982**	**86,582,873**
Totals, 1931	**40,663**	**17,769,690**	**40,826**	**18,542,037**	**138,907**	**92,969,104**	**139,040**	**92,617,979**
Totals, 1930	**54,742**	**17,559,585**	**55,600**	**18,895,972**	**158,530**	**88,373,217**	**159,682**	**88,800,345**
Totals, 1929	**37,320**	**18,987,751**	**38,437**	**20,338,949**	**151,898**	**95,498,497**	**155,237**	**95,290,415**
Totals, 1928	**35,073**	**16,745,632**	**35,918**	**18,843,531**	**150,957**	**86,368,065**	**151,259**	**86,963,348**
Totals, 1927	**29,876**	**14,862,096**	**39,626**	**16,319,794**	**143,480**	**81,211,296**	**142,363**	**81,862,749**
Totals, 1926	**26,040**	**14,117,099**	**27,056**	**15,474,732**	**135,918**	**78,725,299**	**136,287**	**79,409,183**
Totals, 1925	**46,412**	**17,616,105**	**47,011**	**19,341,929**	**154,033**	**78,566,856**	**154,522**	**79,992,014**
Totals, 1924	**50,314**	**18,926,976**	**50,758**	**19,001,995**	**157,610**	**76,692,713**	**155,019**	**75,619,788**
Totals, 1923	**55,958**	**18,864,448**	**56,419**	**19,260,398**	**157,980**	**72,290,372**	**156,045**	**71,172,889**

The relative volume of shipping in the leading ports of the provinces of Canada is shown in Table **59**. Details are given of the sea-going vessels and of the total of all shipping (exclusive of ferriage) arrived and departed at each port. In the fiscal year ended Mar. 31, 1932, the tonnage of sea-going vessels arriving and departing at Vancouver exceeded that at any other port in Canada; Victoria was next, followed by Halifax and Montreal. In total shipping, which included coastwise and inland international as well as sea-going shipping, Vancouver was considerably in the lead, followed by Victoria, Montreal and Halifax.

59.—Number and Tonnage of Sea-going and of All Vessels Entered and Cleared at the Principal Ports of Canada, fiscal year ended Mar. 31, 1932.

NOTE.—For details of coastwise and inland international shipping at these ports and at all other ports of Canada, see the Shipping Report of the Department of National Revenue for the fiscal year ended Mar. 31, 1932. Figures of total shipping are exclusive of ferriage.

Province and Port.	Sea-going Vessels.				Total Shipping.			
	Arrived.		Departed.		Arrived.		Departed.	
	Vessels.	Tons Register.	Vessels.	Tons Register.	Vessels.	Tons Register.	Vessels.	Tons Register.
Prince Edward Island—								
Charlottetown	63	57,185	82	83,207	653	263,313	655	269,370
Nova Scotia—								
Baddeck	28	27,957	27	24,748	476	71,770	479	74,138
Canso	110	16,163	132	17,487	1,411	155,807	1,442	156,000
Digby	12	1,217	20	1,003	539	643,710	547	645,229
Halifax	1,265	3,903,009	1,448	4,021,747	3,105	4,708,569	3,277	4,835,091
Louisburg	45	13,163	40	8,972	183	45,210	185	41,154
North Sydney	751	309,577	723	302,701	1,282	516,657	1,361	520,662
Parrsboro	60	22,722	61	26,860	451	69,101	458	71,376
Pictou	3	1,789	3	906	458	123,276	463	123,118
Port Mulgrave	7	4,095	5	2,978	1,194	129,263	1,194	127,888
Sydney	133	248,486	200	305,406	965	1,221,626	980	1,226,251
Windsor	112	172,598	129	194,782	208	216,687	208	216,816
Yarmouth	491	429,605	459	442,200	1,013	465,950	1,010	476,606
New Brunswick—								
Saint John	608	1,214,508	515	936,826	2,088	2,060,292	2,109	2,083,546
St. Andrews	1,232	107,489	1,229	97,417	1,585	157,607	1,575	150,700
Quebec—								
Chicoutimi	5	6,683	1	1,808	72	34,991	72	35,240
Gaspé	13	21,067	22	34,228	124	78,845	130	82,071
Lévis	4	5,277	–	–	81	100,956	81	101,417
Montreal	849	3,421,257	815	3,296,024	5,538	7,637,641	5,595	7,660,918
Port Alfred	16	47,715	24	77,062	89	301,002	91	301,132
Quebec	431	2,140,837	275	1,151,037	2,320	3,984,305	2,338	3,975,492
Rimouski	6	58,783	7	11,168	651	206,983	648	149,720
Sorel	27	57,217	66	148,918	831	1,594,960	855	1,611,202
Three Rivers	58	161,858	58	161,858	991	1,624,756	982	1,624,585
Ontario—								
Amherstburg	–	–	–	–	868	326,201	861	326,436
Belleville	–	–	–	–	233	179,618	232	178,491
Brockville	–	–	–	–	850	527,228	848	526,758
Cobourg	–	–	–	–	482	1,512,912	481	1,507,891
Collingwood	–	–	–	–	83	128,487	77	121,094
Cornwall	–	–	–	–	289	290,511	271	267,827
Depot Harbour	–	–	–	–	118	241,751	117	241,350
Erieau	–	–	–	–	124	189,040	118	188,869
Fort William	–	–	–	–	1,309	2,915,733	1,141	2,611,569
Goderich	–	–	–	–	100	179,556	99	173,506
Gore Bay	–	–	–	–	216	74,953	215	74,118
Hamilton	–	–	–	–	889	1,437,513	672	848,815
Kingston	–	–	4	2,950	2,262	1,312,961	2,459	1,328,215
Little Current	–	–	–	–	266	135,189	267	134,452
Midland	–	–	–	–	214	479,756	212	459,306

59.—Number and Tonnage of Sea-going and of All Vessels Entered and Cleared at the Principal Ports of Canada, fiscal year ended Mar. 31, 1932—concluded.

Province and Port.	Sea-going Vessels.				Total Shipping.			
	Arrived.		Departed.		Arrived.		Departed.	
	Vessels.	Tons Register.	Vessels.	Tons Register.	Vessels.	Tons Register.	Vessels.	Tons Register.
Ontario—concluded.								
Niagara Falls	–	–	–	–	1,589	1,548,964	1,589	1,548,563
Owen Sound	–	–	–	–	376	302,173	374	310,485
Port Arthur	–	–	–	–	1,135	2,770,319	1,315	3,088,330
Port Colborne	–	–	–	–	1,088	1,796,677	1,066	1,730,937
Port Dover	–	–	–	–	299	187,753	241	186,877
Port McNicoll	–	–	–	–	183	466,801	185	471,721
Port Stanley	–	–	–	–	171	190,384	166	188,168
Prescott	–	–	–	–	706	706,348	704	678,358
Sandwich	–	–	–	–	191	225,019	193	228,202
Sarnia	–	–	–	–	18,071	3,376,748	18,081	3,390,934
Sault Ste. Marie	–	–	–	–	1,822	1,934,976	1,824	1,768,996
Thorold	–	–	–	–	151	212,647	149	206,896
Toronto	–	–	–	–	2,635	2,558,454	2,622	2,537,247
Walkerville	–	–	–	–	420	176,822	415	176,023
Wallaceburg	–	–	–	–	181	123,127	178	122,025
Welland	–	–	–	–	125	147,633	72	89,204
Windsor	–	–	–	–	512	1,169,970	506	1,167,361
British Columbia—								
Alert Bay	329	10,124	369	9,964	1,281	540,229	1,317	545,549
Anyox	10	72	30	29,565	462	311,018	466	311,092
Bamfield	34	1,646	26	1,529	546	112,387	537	114,373
Britannia Beach	97	231,276	100	241,391	611	366,783	606	368,008
Butedale	58	1,532	58	1,533	518	133,468	516	133,412
Chemainus	260	405,566	266	403,595	696	509,923	699	506,961
Ladysmith	61	46,491	53	36,830	894	405,493	899	408,224
Nanaimo	226	254,023	269	266,638	2,520	1,370,144	2,554	1,364,920
New Westminster	332	1,054,008	321	1,048,764	1,763	1,476,439	1,830	1,468,569
Ocean Falls	61	119,843	71	153,543	958	719,291	958	719,960
Port Alberni	114	365,945	116	366,098	494	477,742	490	474,800
Powell River	177	282,592	176	299,892	2,076	1,170,991	2,085	1,180,962
Prince Rupert	1,941	272,723	1,900	251,376	3,270	913,604	3,327	904,355
Quatsino	73	54,471	87	75,692	367	167,906	357	166,105
Stewart	6	2,528	15	16,923	267	283,147	267	284,631
Sidney	446	135,224	411	131,685	691	222,804	691	223,038
Union Bay	127	189,616	121	183,537	791	421,162	791	424,043
Vancouver	2,268	6,017,499	2,063	5,686,980	14,127	11,809,539	14,197	11,924,131
Victoria	2,228	4,493,434	2,099	3,989,828	5,315	8,256,399	5,393	8,359,783

Section 5.—Shipping Constructed and on the Registry.

The shipbuilding industry in Canada dates from the earliest settlement of the country, and up till the 1870's was one of the leading industries of Quebec and of the Maritime Provinces, 490 vessels with a total tonnage of 183,010 being constructed in the calendar year 1874. At that time, however, the advent of the steel ship rendered the wooden vessels, the material for which was so abundant in Canada, obsolete, with the result that the tonnage built has never again reached the above figure, though in the fiscal years 1919 and 1920 the construction of the Canadian Government Merchant Marine, built as an extraordinary measure arising out of the War, raised the totals constructed to 104,444 and 164,074 tons respectively. Statistics of ships built and registered in Canada or sold to other countries are given in Table **60**. For further information on the shipbuilding industry, see Table **7** of the chapter on Manufactures, pp. 428-429.

60.—Vessels Built and Registered in Canada and Vessels Sold to Other Countries, fiscal years ended Mar. 31, 1911-32.

NOTE.—For 1874-1900, see Canada Year Book, 1911, p. 383, and for 1901-10, see 1932 Year Book, p. 597. Statistics are from the Shipping Reports of the Department of National Revenue.

Fiscal Year.	Built.		Registered.		Sold to Other Countries.		
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	Value.
							$
1911	247	22,812	234	50,006	17	5,885	201,526
1912	326	31,065	302	30,021	18	4,265	140,350
1913	324	24,325	328	30,225	20	7,976	610,650
1914	289	46,887	230	46,909	27	8,258	169,618
1915	224	45,721	237	55,384	21	17,044	1,150,950
1916	167	13,497	325	102,239	21	4,529	192,575
1917	184	28,638	334	105,826	47	24,954	4,398,570
1918	216	53,912	336	70,350	63	25,252	5,330,850
1919	277	104,444	327	102,883	85	48,965	14,612,338
1920	352	164,074	459	237,022	68	53,407	17,819,477
1921	220	95,838	323	188,915	69	34,623	8,456,573
1922	143	78,409	228	131,732	35	25,462	3,399,450
1923	154	14,868	274	57,446	18	26,394	1,009,327
1924	160	20,336	194	74,311	21	17,076	605,211
1925	232	36,147	198	48,054	28	21,689	717,730
1926	247	39,840	218	88,380	27	24,673	1,413,150
1927	341	32,801	281	79,448	32	27,027	1,984,040
1928	236	12,904	417	64,301	31	16,307	599,490
1929	328	49,798	386	155,972	30	18,627	154,750
1930	282	28,871	468	84,529	34	33,779	805,636
1931	294	45,162	396	129,088	22	8,865	421,500
1932	202	19,032	319	64,396	23	18,849	889,221

The numbers and net tonnages of the vessels on the registry of Canada, as at the end of each of the calendar years from 1923 to 1932, are given by provinces in Table **61.** In 1932 there were 8,895 vessels with a tonnage of 1,475,128.

61.—Number and Net Tonnage of Vessels on the Registry of Shipping of Canada, by Provinces, Dec. 31, 1923-32.

NOTE.—The figures in this table are supplied by the courtesy of the Department of Marine.

Province.	1923.		1924.		1925.		1926.		1927.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
P.E. Island	133	9,600	133	9,078	131	8,997	127	8,556	133	8,581
Nova Scotia	1,505	140,641	1,488	134,991	1,475	135,761	1,452	134,539	1,412	129,482
New Brunswick	873	38,798	808	34,644	818	33,318	816	33,002	829	33,077
Quebec	1,298	443,177	1,305	425,852	1,341	438,253	1,369	447,889	1,368	456,092
Ontario	1,677	317,850	1,649	314,297	1,667	326,571	1,702	387,036	1,724	397,987
Manitoba	93	10,207	93	10,207	93	10,207	94	10,321	96	10,661
Saskatchewan	6	486	6	486	6	486	6	486	6	486
British Columbia	2,101	268,489	2,198	289,549	2,373	327,524	2,618	325,190	2,872	327,984
Yukon	8	1,632	9	1,916	9	1,916	9	1,916	14	3,650
Totals	**7,694**	**1,230,880**	**7,689**	**1,221,020**	**7,913**	**1,283,033**	**8,193**	**1,348,935**	**8,454**	**1,368,000**

	1928.		1929.		1930.		1931.		1932.	
P. E. Island	132	8,549	134	8,370	130	8,351	129	10,996	134	11,124
Nova Scotia	1,436	126,428	1,471	127,080	1,478	119,055	1,434	112,891	1,400	113,352
New Brunswick	828	33,395	885	34,031	919	38,350	983	39,766	983	39,293
Quebec	1,373	502,224	1,265	506,594	1,262	495,017	1,277	506,787	1,321	509,634
Ontario	1,746	367,007	1,759	347,531	1,775	392,708	1,771	378,925	1,761	422,336
Manitoba	98	10,684	103	11,051	105	11,185	110	11,461	112	11,485
Saskatchewan	6	486	6	486	6	486	6	486	6	486
British Columbia	3,012	313,651	3,257	335,810	3,203	361,328	3,178	361,305	3,161	362,387
Yukon	14	3,650	19	4,543	20	5,584	17	5,031	17	5,031
Totals	**8,645**	**1,366,074**	**8,899**	**1,375,493**	**8,898**	**1,432,064**	**8,905**	**1,427,648**	**8,895**	**1,475,128**

Section 6.—The Department of Marine.[1]

Administration of the general shipping interests of Canada is in the hands of the Dominion Department of Marine. It deals with: (1) administration of the Canada Shipping Act and other Acts of the Dominion Government relating to marine transportation; (2) pilotage; (3) the construction and maintenance of lighthouses, lightships, fog alarms, buoys and beacons; (4) ports, harbours, piers, wharves and breakwaters; (5) the Meteorological Service of Canada; (6) relief of distressed seamen; (7) hydrographic, tidal and current surveys; (8) inquiries into the causes of shipwrecks and casualties, and the collection of wreck statistics; (9) life-saving service; (10) the inspection of steamboats; (11) the construction and maintenance of the St. Lawrence River ship channel; (12) marine signal service; (13) ice breaking and (14) the administration of Government radiotelegraph stations and the supervision of private stations in Canada. The net revenue of the Department for the fiscal year ended Mar. 31, 1932, was $871,529, and the expenditure for the same period was $25,056,916.

A summary statement of the revenue and expenditure of the Department of Marine is given for each fiscal year since Confederation in Table **62**, while details for the six years from 1927 to 1932 are presented in Tables **63** and **64**.

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[1] **Revised by F. McVeigh, Assistant Deputy Minister, Department of Marine.**

62.—Total Revenues and Expenditures of the Department of Marine, fiscal years ended June 30, 1868-1906, and Mar. 31, 1907-32.

Fiscal Year.	Revenue.	Expenditure.	Fiscal Year.	Revenue.	Expenditure.	Fiscal Year.	Revenue.	Expenditure.
	$	$		$	$		$	$
1868	71,811	371,071	1890	115,507	807,417	1912	185,579	4,911,141
1869	75,351	360,900	1891	104,248	885,410	1913	185,725	5,213,223
1870	71,490	367,189	1892	106,582	861,427	1914	217,034	5,828,027
1871	70,254	389,537	1893	107,390	898,720	1915	795,550[3]	6,202,908
1872	79,324	518,958	1894	165,870	905,654	1916	461,457	5,621,611
1873	114,756	706,818	1895	99,557	895,828	1917	574,498	4,768,784
1874	108,350	845,151	1896	103,012	793,634	1918	228,812	4,361,498
1875	91,235	844,586	1897	111,009	867,773	1919	396,779	4,459,165
1876	107,984	970,146	1898	120,602	856,192	1920	303,002	38,301,080[2]
1877	105,907	820,054	1899	126,528	1,102,602	1921	396,617	26,038,902
1878	100,850	786,156	1900	130,229	982,562	1922	701,497	20,419,883
1879	84,144	755,359	1901	144,919	1,029,925	1923	574,567	13,156,182
1880	91,942	723,391	1902	148,607	1,501,619	1924	593,722	13,160,680
1881	108,304	761,731	1903	139,876	1,671,495	1925	416,864	13,636,145
1882	109,125	774,832	1904	128,507	2,150,940	1926	479,475	16,776,939
1883	104,383	825,011	1905	121,815	4,747,723	1927	629,761	10,270,674
1884	118,080	927,242	1906	139,475	5,066,253	1928	615,089	15,368,692
1885	101,268	1,129,901	1907[1]	106,260	3,637,600	1929	671,224	18,167,190
1886	91,885	980,121	1908	177,591	5,374,774	1930	810,530	23,508,502
1887	102,238	917,557	1909	169,502	5,498,531	1931	981,061	27,486,719
1888	99,920	883,251	1910	156,957	4,692,771	1932	871,529	25,056,916
1889	99,940	1,023,801	1911	154,492	4,197,420			

[1] Nine months. [2] The increase in expenditure in 1920 and later years was due to the shipbuilding program and to loans to harbour commissions. [3] Includes $493,000 from sale of steamer *Earl Grey* to the Russian Government.

63.—Revenue of the Department of Marine, by Sources, fiscal years ended Mar. 31, 1927-32.

Source of Revenue.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Harbours, piers and wharves	117,077	57,803	45,878	53,281	54,668	78,674
Earnings of Dominion steamers	11,875	5,909	–	376	20	51
Steamboat inspection fund	135,131	127,852	136,932	131,356	144,332	113,231
Examination, masters and mates	4,281	5,002	5,181	5,126	4,733	3,381
Casual revenue, sundries	80,724	98,659	121,990	104,860	94,323	89,691
Radio revenue	69,539	64,219	81,760	90,728	75,753	50,700
Fines and forfeitures	2,924	4,225	3,728	5,228	1,119	953
Wireless amateur licence fees	206,243	249,693	271,526	407,762	468,093	528,942
Wireless operators' examination fees	427	480	361	421	605	810
Miscellaneous	1,205	1,247	1,283	2,067	1,427	1,258
Capital account	335	–	2,585	9,325	135,988	3,838
Totals	**629,761**	**615,089**	**671,224**	**810,530**	**981,061**	**871,529**

64.—Expenditure of the Department of Marine, fiscal years ended Mar. 31, 1927-32.

Item of Expenditure.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Ocean and River Service—						
Investigation into wrecks	5,832	5,749	4,921	4,754	5,979	4,874
Registration of shipping	2,163	2,573	2,162	2,402	2,948	1,882
Removal of obstructions	95,443	1,771	1,095	223	3,498	297
Life-saving service	62,668	62,919	53,380	60,478	55,030	57,535
Dominion steamers and icebreakers	1,497,106	1,625,501	1,954,580	1,647,499	1,752,352	1,505,850
Schools of navigation	7,752	7,288	7,816	7,174	7,320	7,620
Cattle inspection	4,000	3,709	3,644	3,671	3,654	3,839
Wrecking plants (subsidy)	35,000	45,000	45,000	45,000	70,000	70,000
Hudson Bay patrol	–	1,021,513	289,464	12,989	–	–
Examination, masters and mates	18,930	19,303	20,000	20,461	21,615	20,115
Hydrographic survey	266,480	310,699	386,739	508,246	565,722	494,051
New steamer for hydro survey	–	–	–	–	4,357	514,259
Radio telegraph	439,804	475,204	735,004	829,499	764,633	649,356
Radio reception	111,782	154,543	166,776	225,265	221,656	216,906
Radio Broadcasting Commission	–	–	–	20,603	–	–
Three new steamers	–	–	–	173,000	–	–
Icebreaker, Hudson bay	–	–	–	791,299	135,355	31,985
Icebreaker, St. Lawrence river	–	–	–	747,028	12,103	–
Other items of expenditure	33,848	13,333	12,675	25,741	10,879	52,259
Totals	**2,580,808**	**3,749,105**	**3,683,256**	**5,125,332**	**3,637,101**	**3,630,828**
Lighthouse and Coast Service—						
Agencies and contingencies	212,635	210,048	223,280	227,064	228,686	225,016
Administration of pilotage	82,624	121,744	141,657	118,099	111,099	158,080
Salaries and allowances to lightkeepers	674,581	676,080	718,777	733,977	733,976	732,619
Maintenance and repairs to lighthouses, etc.	830,772	893,182	889,223	915,978	953,890	932,698
Construction of lighthouses, etc.	511,402	597,633	683,012	684,482	1,166,849	374,249
Breaking of ice	30,000	30,000	30,000	58,000	44,000	44,000
Signal service	99,765	102,938	109,994	107,947	103,689	105,474
New steamer	–	94,968	–	–	–	–
Other items of expenditure	24,179	20,167	16,957	25,719	49,637	22,220
Totals	**2,465,958**	**2,746,761**	**2,812,900**	**2,871,266**	**3,391,826**	**2,594,356**
Public Works, chargeable to Capital—						
Ship channel, river St. Lawrence	1,605,049	1,921,903	1,894,912	2,753,019	3,462,951	4,242,538
Salvage of scow 27	–	–	–	–	–	13,000
Sorel shipyard	151,316	95,562	162,019	[1]	[1]	[1]
Allowances	–	–	6,625	2,438	–	–
St. Lawrence River dams	–	–	–	405,589	397,410	283,751
Provisions for Dredge 8	–	–	–	–	1,476	–
Totals	**1,756,366**	**2,017,464**	**2,063,536**	**3,161,046**	**3,861,837**	**4,539,289**

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[1] Included with "Ship channel, river St. Lawrence" for 1930-32.

64.—Expenditure of the Department of Marine, fiscal years ended Mar. 31, 1927-32—concluded.

Item of Expenditure.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Scientific Institutions—						
Meteorological Service—						
Totals	**243,233**	**270,276**	**287,908**	**316,707**	**367,622**	**401,592**
Steamboat inspection	121,961	131,065	141,485	140,253	143,764	143,394
Departmental salaries	385,700	382,293	392,453	397,851	402,460	401,738
Contingencies	44,530	53,426	54,798	55,205	69,814	67,328
Bonus and salary revision	–	102,659	–	–	–	–
Gratuities	6,118	6,487	2,634	4,842	4,461	4,214
Investigation Halifax Harbour Board	–	–	–	–	–	7,654
Montreal Harbour Commission	1,035,000	2,180,000	3,110,000	4,336,000	2,921,000	1,160,000
Quebec Harbour Commission	903,000	2,160,000	2,888,000	2,821,000	3,491,000	1,379,000
Vancouver Harbour Commission	728,000	1,564,000	1,596,000	345,000	2,802,000	809,000
Halifax Harbour Commission	–	–	30,000	1,272,000	3,539,000	2,752,000
Chicoutimi Harbour Commission	–	–	500,000	815,000	846,000	465,000
Saint John Harbour Commission	–	–	602,000	1,711,000	1,094,000	5,763,855
Three Rivers Harbour Commission	–	–	–	136,000	1,543,600	747,568
New Westminster Harbour Commission	–	–	–	–	–	189,140
Miscellaneous and unforeseen	–	5,156	2,200	–	1,235	960
Grand Totals	**10,270,674**	**15,368,693**	**18,167,190**	**23,508,502**	**27,486,720**	**25,056,916**

Steamboat Inspection.—The Steamboat Inspection Service of Canada, maintained under the authority of the Department of Marine, comprises the Board of Steamboat Inspection, together with staffs of inspectors at the principal ocean and inland ports. The Board decides on the standards required of all vessels coming under its jurisdiction. These must be attained by all ships given official warrant as to their seaworthiness and mechanical condition. Further, the Board grants certificates of competency to engineers of steamboats.

A table showing the number and tonnage of steamboats inspected during the fiscal year ended Mar. 31, 1932, follows:—

65.—Steamboat Inspection, fiscal year ended Mar. 31, 1932.

Division.	Vessels Inspected.				Vessels not Inspected.	
	Vessels Registered or Owned in the Dominion.		Vessels Registered or Owned Elsewhere.			
	No.	gross tonnage.	No.	gross tonnage.	No.	gross tonnage.
Halifax	120	103,386	16	62,868	14	65,836
Saint John	58	35,382	2	7,652	48	27,540
Quebec	78	55,326	–	–	8	2,696
Sorel	106	56,223	–	–	21	3,548
Montreal	140	120,053	9	19,272	61	11,882
Kingston	121	146,516	4	190	–	–
Toronto	191	289,250	40	58,644	22	24,321
Midland	80	62,773	2	54	25	12,805
Collingwood	78	18,841	–	–	32	8,978
Port Arthur	76	56,613	–	–	77	8,112
Vancouver	226	135,978	8	68,432	103	62,361
Victoria	60	61,116	11	44,007	33	27,154
Totals	**1,334**	**1,141,457**	**92**	**261,119**	**444**	**255,233**

65.—Steamboat Inspection, fiscal year ended Mar. 31, 1932—concluded.

Division.	Vessels Subject to Inspection when in Commission.		Vessels Added to the Dominion Register.		Vessels Lost, Broken Up or Destroyed.	
	No.	gross tonnage.	No.	gross tonnage.	No.	gross tonnage.
Halifax	150	232,090	2	4,569	2	561
Saint John	108	70,574	–	–	2	1,449
Quebec	86	58,022	1	5,889	–	–
Sorel	127	59,771	4	437	4	5,124
Montreal	210	151,207	8	3,447	3	122
Kingston	125	146,706	2	1,931	–	–
Toronto	253	372,215	5	8,906	5	195
Midland	107	75,632	1	462	3	58
Collingwood	110	27,819	4	71	6	908
Port Arthur	153	64,725	6	155	1	12
Vancouver	337	266,771	5	7,665	13	2,332
Victoria	104	132,277	–	–	–	–
Totals	**1,870**	**1,657,809**	**38**	**33,532**	**39**	**10,761**

Fees collected during the year on account of inspections totalled $111,869 and those on account of examinations of engineers amounted to $1,362, giving a combined total revenue of $113,231 collected by inspectors.

Seamen Shipped and Discharged.—Table **66** shows, for each year from 1908 to 1931, the number of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S.C., 1927, c. 186).

66.—Number of Seamen Shipped and Discharged at Canadian Ports, calendar years 1908-31.

Year.	Seamen Shipped.	Seamen Discharged.	Year.	Seamen Shipped.	Seamen Discharged.
1908	18,013	11,542	1920	22,569	19,719
1909	20,502	11,573	1921	18,444	17,103
1910	16,735	11,069	1922	25,689	24,558
1911	13,748	11,301	1923	31,407	30,195
1912	13,708	11,290	1924	30,687	29,018
1913	16,975	13,749	1925	31,772	28,472
1914	18,987	14,989	1926	31,869	27,413
1915	22,797	14,319	1927	28,137	25,863
1916	20,902	16,689	1928	28,748	25,763
1917	16,998	14,145	1929	31,374	29,483
1918	16,516	12,930	1930	26,983	25,670
1919	18,208	13,649	1931	24,891	24,289

Wrecks and Casualties.—The statement in Table **67**, supplied by the Department of Marine, applies to vessels of every nationality in respect of wrecks and casualties in Canadian waters, and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years. Statistics of marine danger signals appear in Table 68.

67.—Canadian Wrecks and Casualties, years ended June 30, 1901-17, and calendar years 1918-31.

NOTE.—For details of the years 1870-1900, see Canada Year Book, 1911, p. 381.

Year.	Casualties.	Net Tonnage.	Lives Lost.	Stated Damages.	Year.	Casualties.	Net Tonnage.	Lives Lost.	Stated Damages.
	No.	tons.	No.	$		No.	tons.	No.	$
1901	136	47,181	126	285,782	1917	239	715,384	152	4,850,145[2]
1902	222	105,814	132	835,916	1918	226	312,928	402[3]	1,818,895
1903	237	162,297	32	409,991	1919	240	205,720	100	1,808,690
1904	192	81,143	9	489,699	1920	227	222,928	28	1,643,825
1905	178	79,588	15	621,267	1921	260	588,503	38	1,809,328
1906	220	139,586	149	573,420	1922	277	604,423	27	451,312
1907	317	131,441	55	672,466	1923	376	480,713	50	3,184,749
1908	307	120,269	34	1,390,891	1924	224	215,470	54	4,355,217
1909	343	189,906	24	1,131,966	1925	298	305,798	53	3,317,020
1910	321	211,565	101	1,569,580	1926	300	293,310	91	4,630,267
1911	271	122,619	48	942,093	1927	434	566,011	128	6,879,825
1912	293	269,569	59	1,053,768	1928	504	558,251	64	5,418,236
1913	275	270,905	160	1,963,870	1929	451	459,394	12	4,740,620
1914	255	210,368	1,083[1]	4,983,775	1930	551	447,169	66	3,077,009
1915	280	214,036	70	1,459,012	1931	477	404,157	7	2,696,019
1916	308	242,996	67	1,377,442					

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[1] Includes 1,042 lives lost in the *Empress of Ireland* disaster. [2] Excluding damage to cargo estimated at $4,310,350. [3] Includes 328 lives lost in the *Princess Sophia* disaster.

68.—Comparative Statement of Marine Danger Signals, fiscal years ended Mar. 31, 1921-32.

NOTE.—Besides the following, there were, in 1932, 49 lighted spar-buoys, floats and dolphins; 5,618 unlighted buoys; 846 unlighted tripods, floats, dolphins, spindles and beacons; and 2,678 stakes, bushes and balises.

Description.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Lights	1,598	1,602	1,596	1,627	1,654	1,675	1,725	1,771	1,815	1,855	1,912	1,923
Lightships	9	9	9	10	10	10	11	11	11	11	11	11
Lightkeepers	1,130	1,118	1,105	1,119	1,134	1,143	1,156	1,179	1,192	1,207	1,227	1,230
Fog whistles	8	8	8	9	8	8	8	6	8	8	8	8
Sirens	1	1	1	1	1	1	2	2	2	2	2	2
Diaphones	134	135	138	140	146	146	147	153	158	162	165	170
Fog bells	33	35	36	35	35	36	35	36	38	38	38	38
Hand fog horns	148	148	148	147	149	148	148	151	147	151	152	153
Hand fog bells	4	4	4	4	4	4	5	4	4	4	4	4
Gas, whistling and bell buoys	343	345	349	359	374	374	380	401	411	425	429	436
Whistling buoys	30	29	30	30	32	34	36	38	40	40	40	42
Bell buoys	90	90	92	95	98	99	101	104	111	119	119	119
Submarine bells	11	7	7	7	7	6	6	6	4	4	4	3
Fog guns and bombs	7	7	7	7	6	6	6	6	5	5	5	5
Fog horns	1	1	–	–	–	–	–	–	–	–	–	–
Fog alarm stations only	13	13	12	12	13	13	13	13	13	13	13	13

Section 7.—Merchant Marine Services Operated by the Canadian Government.[1]

The War had far-reaching effects upon the merchant shipping of the world. The losses from submarines, the demands for naval auxiliary and transport services, and the abnormally large quantities of material to be carried overseas for both war purposes and the support of the civilian populations of Europe, all combined to create pressing demands for merchant shipping. In the latter part of the War, when submarine operations were intensified, the supply of merchant tonnage became a source of serious anxiety to the Allies and every effort was made not only to economise the shipping then afloat but to increase the supply by new building. It was under these circumstances that the Dominion Government placed orders with Canadian shipbuilding firms for the construction of 63 steel cargo vessels of six different types. These vessels were intended primarily to co-operate with British shipping in supplying the necessities of war, but, though the War ended before the ships were all built, the construction program was continued to provide employment and, in view of the losses of the War, to assure sufficient shipping as a complement to the National Railways and as a means of carrying abroad the products of Canada's farms, forests, mines and factories.

Shipping construction at that time was very costly and this abnormally high first cost has been a serious handicap to the economical operation of the ships ever since. Prior to Dec. 31, 1919, 19 vessels had been delivered by the builders. Additions were subsequently made to the fleet until the total fleet, as at Dec. 31, 1924, numbered 57 vessels of a total deadweight tonnage of 353,450. Through sale and the loss of three vessels the fleet was reduced to 29 vessels with a deadweight tonnage of 234,595 at Dec. 31, 1931. Early operations proved profitable: a surplus of $1,056,767 was shown for the year ended Dec. 31, 1919 and a surplus of $1,293,525 for the year ended Dec. 31, 1920 (without provision for interest charges). Subsequent years, however, have shown the effects of the depression in the shipping industry, and annual deficits of $8,047,635, $9,649,479, $9,368,670, $8,836,609, $7,667,513, $6,687,221, $7,086,940, $7,545,525, $5,928,758, $5,844,757 and $5,405,414 are shown for the years 1921 to 1931 respectively. These figures include interest and depreciation assessed on the original high cost of the vessels.

In conformity with the Canada-West Indies Trade Agreement Act of 1926 (16-17 Geo. V, c. 16), the Dominion Government has provided direct steamship services to the West Indies through the medium of Canadian National (West Indies) Steamships, Ltd. The service is provided by a fleet of twelve vessels of a total deadweight tonnage of 60,592. Five of these boats, known as the "Lady" ships, were specially constructed for passenger service on this route, while the remaining seven vessels previously formed part of the Canadian Government Merchant Marine fleet, and were taken over by the Canadian National (West Indies) Steamships, Ltd., for operating purposes, under entrusting agreements with the respective companies which owned the ships. The investment in vessels at Dec. 31, 1931, amounted to $9,848,167, mainly made up of the construction cost of the "Lady" ships and the present day valuation of the other seven ships, together with the cost of conversion for use in the West Indies service of three of the latter. The financial results of the operations of the Canadian National (West Indies) Steamships, Ltd., have been as follows:—

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[1] Revised under the direction of Geo. W. Yates, Assistant Deputy Minister, Department of Railways and Canals, by A. H. Allan, General Manager, Canadian National Steamships, Montreal.

Calendar Year.	Operating Revenues.	Operating Expenses.	Net Operating Loss.	Depreciation.	Interest.	Book Loss.
	$	$	$	$	$	$
1929	3,332,683	3,780,524	447,841	227,315	442,739	1,117,895
1930	3,792,694	4,315,831	523,137	288,999	550,519	1,362,655
1931	3,648,986	4,095,555	446,569	294,141	604,651	1,345,361

PART X.—TELEGRAPHS.[1]

The Toronto, Hamilton and Niagara Electro-Magnetic Telegraph Co., organized by a group of Toronto men, was the first to establish an electric telegraph service in the pre-Confederation province of Canada. It was formally organized on Oct. 22, 1846, and its Toronto-Hamilton line was opened on Dec. 19 of the same year. In January, 1847, the line was completed to Queenston, whence there was a connecting line to Buffalo. The Montreal Telegraph Co. commenced the construction of a line to Toronto in February, 1847, and began actual operation between the two cities on Aug. 3 of the same year. By the end of the year it had 540 miles of wire in use, 9 offices and 35 employees, and had sent out 33,000 messages. Both the Montreal and the Toronto companies were incorporated by special Acts at the 1847 session of the Legislature. In 1852 the Toronto, Hamilton and Niagara Co. sold out to the Montreal company.

The British North American Electrical Association was also formed in 1847, with the object of connecting Quebec with the Maritime Provinces, but for some years its line went no further than Rivière du Loup, though it was finally extended to Woodstock, N.B., where it connected with the American Telegraph Co., which already had lines in New Brunswick. The New Brunswick Telegraph Co. built a line connecting Saint John with the Maine Lines in 1848, and in the following year extended it to Amherst, N.S., where it connected with the Nova Scotia line, bringing Halifax for the first time into telegraphic communication with New York.

The movement for consolidation of services, so evident in the Canadian railways, was also active among the telegraph companies. Thus the Montreal company bought out the Toronto, Hamilton and Niagara Telegraph Co., the Montreal and Bytown Telegraph Co. and the Grand Trunk Telegraph Co., and maintained a strenuous competition with the Dominion Telegraph Co., organized in 1868. In 1881, however, the conflicting interests were consolidated under lease by the Great North Western Telegraph Co., this move effecting great economies in operation. A few years later, however, the Canadian Pacific Railway Co. established competing lines and by September, 1886, had opened 366 offices in Ontario, Quebec and Western Canada.

The Dominion Government Telegraph Service was commenced with the object of furnishing rapid communication in outlying districts where the amount of business was so small that commercial companies would not enter the field, but where the public interests required that there should be communication. Its services are especially useful in connection with the signal and other stations established by the Department of Marine along the north shore of the Gulf of St. Lawrence, and in the Maritime Provinces and British Columbia. On Mar. 31, 1932, the Government Telegraph Service comprised 9,077¾ miles of pole line, 11,118¼ miles of wire, 367¾ knots of cable and 731 offices. Details will be found in the Annual Report of the Minister of Public Works.

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[1] Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics, which issues an annual report dealing with telegraph statistics.

Telegraph Systems.—The Canadian telegraph systems are composed of lines owned by the Dominion Government and by chartered railway and telegraph companies. The lines previously owned by the Great North Western Telegraph Co., the Grand Trunk Pacific Telegraph Co., the Canadian Northern Railway Co. and the National Transcontinental Railway are now owned by the Government and are operated by the Canadian National Telegraph Co. (formerly Great North Western Telegraph Co.). The Dominion Government Telegraph Service operates the line to Yukon and other lines in outlying districts.

The Canadian system, in proportion to population, is one of the most extensive in the world, and is operated under considerable climatic and geographic disadvantages. In the operation of railways and in the receipt and dispatch of market and press reports, its services to the nation are invaluable.

Telegraph Statistics.—A brief summary table giving the more important figures of the operation of Canadian telegraphs from 1920 to 1931 follows. For details see the Bureau of Statistics' Annual Report on Telegraph Statistics.

69.—Summary Statistics of All Canadian Telegraphs for the calendar years 1920-31.

Year.	Gross Revenue.	Operating Expenses.	Net Operating Revenue.	Pole Line Mileage.	Wire Mileage.	Employees.	Offices.	Messages, Land.	Cablegrams.[3]	Money Transferred.
	$	$	$	miles.	miles.	No.	No.	No.	No.	$
1920	11,337,428	9,589,982	1,747,446	52,393	238,866	7,508	4,825	15,589,711	1,162,204	7,045,661
1921	11,310,989	9,734,299	1,576,690	52,828	250,802	7,818	4,901	15,013,993	1,154,787	5,150,916
1922	11,018,762	9,846,425	1,172,337	53,096	262,343	8,500	4,762	15,271,410	4,736,204	4,404,407
1923	11,417,284	9,931,815	1,485,439	53,383	270,782	8,275	4,961	16,150,106	5,055,115	5,326,352
1924	10,930,020	9,603,620	1,326,400	54,742	268,632	8,909	4,945	15,460,811	5,790,582	6,428,080
1925	11,520,322	9,681,200	1,839,122	51,726[1]	284,121	7,224[2]	4,664	14,460,988	6,104,025	6,680,595
1926	12,143,388	10,166,040	1,977,348	52,612[1]	305,933	6,755[2]	4,801	14,934,683	6,421,673	7,790,127
1927	12,990,549	10,600,412	2,390,137	52,731[1]	323,539	7,338[2]	4,885	15,564,067	6,664,771	9,241,864
1928	14,740,641	11,647,063	3,093,578	53,777[1]	337,971	7,639[2]	4,909	16,857,220	6,861,195	9,776,090
1929	16,256,441	12,590,364	3,666,077	52,835[1]	360,883	8,056[2]	4,766	18,029,973	5,210,926	11,295,857
1930	14,264,997	11,791,291	2,473,706	52,824[1]	371,747	7,331[2]	4,661	15,558.224	6,745,220	10,213,475
1931	11,641,729	10,720,949	920,780	53,228[1]	368,583	6,637[2]	4,474	13,200,198	6,097,713	7,475,928

[1] Excluding U.S. lines of Canadian National Telegraphs. [2] Excluding railway employees.
[3] Including transatlantic cablegrams relayed between Canso, N.S., and the United States.

Table **70** gives figures of telegraph operation and line and wire mileage of various companies for the years 1926 to 1931. Statistics of the Halifax and Bermudas Cable Co., the Canadian Marconi Wireless Telegraph Co. and the Pacific Cable Board are not included.

70.—Statistics of Chartered Telegraph Companies for the calendar years 1926-31.

Company.	Yrs.	Miles of Line.	Miles of Wire.	Number of Messages.[1]	Number of Offices.[3]
Canadian National Telegraph Co.[4] (Formerly Great North Western Telegraph Co.)	1926	23,031	129,042	7,538.301	1,922
	1927	23,049	136,143	7,875,550	1,941
	1928	23,412	141,523	8,238,893	1,943
	1929	24,565	166,121	9,488,208	2,135
	1930	24,828	169,163	8,570,571	2,130
	1931	24,627	166,594	7,274,795	2,092
Canadian Pacific Railway Co.	1926	15,686	141,924	5,863,568[2]	1,510
	1927	15,775	151,329	6,072,459[2]	1,566
	1928	16,429	160,287	6.858,597[2]	1,638
	1929	16,794	167,664	7,259,205[2]	1,642
	1930	16,919	172,210	6,216,491[2]	1,639
	1931	17,522	175,568	5,266,094[2]	1,535
Western Union	1926	2,751	18,493	779,188	207
	1927	2,721	18,179	832,312	202
	1928	2,721	18,129	881,245	194
	1929	1,178	10,910	414,506	[5]
	1930	1,177	10,991	[5]	[5]
	1931	1,186	11,015	[5]	[5]
Temiskaming and Northern Ont. Ry. Commission	1926	422	2,009	130,770	36
	1927	449	3,270	135,613	37
	1928	450	3,288	153,842	38
	1929	450	3.288	128,852	38
	1930	549	3,513	116,934	41
	1931	593	3,285	117,990	38
The North American Telegraph Co., Ltd.	1926	–	445	76,826	19
	1927	–	445	78,531	19
	1928	–	445	84,427	18
	1929	–	445	87,514	18
	1930	–	445	78,682	18
	1931	–	445	69,067	16
Dominion Government Telegraph Service	1926	10,722	14,020	522,796	1,066
	1927	10,737	14,173	536,842	1,082
	1928	10,765	14,299	535,605	1,040
	1929	9,848	12,455	537.080	895
	1930	9,351	11,399	495,562	796
	1931	9,300	11.666	411,806	756

[1] Cablegrams not included. The total in Table **69** includes messages handled by the Marconi Wireless Telegraph Co. [2] Not including press messages. [3] The total in Table **69** includes offices of wireless and cable companies. [4] Statistics of the Grand Trunk Pacific Telegraph Company have been included with the Canadian National up to 1927; the two were amalgamated in 1928. [5] Included with Canadian National.

Submarine Cables.—Six transoceanic cables have termini in Canada—five of them on the Atlantic coast and one on the Pacific. The year in which the cable was first demonstrated to be of commercial value was 1866, and up to the present its use has greatly increased. The Atlantic cables are controlled by English and United States' interests. The Pacific cable, from Canada to Australia and New Zealand, has been in operation since 1902, and was owned by a partnership of the Governments of Great Britain, New Zealand, Australia and Canada. As a result of the recommendation of the Imperial Wireless and Cable Conference of 1928, in view of increased wireless competition, it was decided to dispose of the Pacific and West Indian Islands cable systems to the Imperial and International Communication Co., a company formed to take over all Empire-owned cables and lease the Empire-owned beam wireless systems. The necessary legislation was passed by Great Britain in February, 1929, and by Canada in June, 1929.

PART XI.—TELEPHONES.[1]

The telephone is in part a Canadian invention, though its inventor, Alexander Graham Bell, a Scotsman by birth, was at the time of its invention a resident of the United States, having immigrated with his father to Brantford, Ontario, in 1870, and subsequently proceeded to Boston. According to his account, the discovery of the telephone, both as to its main principle and as to the first transmission of the human voice, was made at his father's residence at Tutela Heights, Brantford, in 1876, and the first telephone talk over any distance was conducted between Brantford and Paris, a distance of 8 miles, on Aug. 10, 1876.

Telephone development in Canada dates from the year 1880, when the Bell Telephone Co. was incorporated by Act of Parliament. Although at this time all patents and lines were owned by the Canadian Telephone Co., this was dependent on the Bell Co., to which it sold out in 1882. By 1883 the first submarine telephone cable had been laid between Windsor and Detroit, and during the year the Bell Co. operated in Canada 4,400 rental-earning telephones, 44 exchanges and 40 agencies, with 600 miles of long-distance wire. It controlled development in all the provinces except British Columbia, where the greater part of the system has always been in the hands of the British Columbia Telephone Co., Ltd.

With the rapid growth of private companies in the Maritime Provinces, the lines of the Bell Co. were disposed of in 1888 to the Maritime Telegraph and Telephone Co. in Nova Scotia, and to the New Brunswick Telephone Co. in New Brunswick, an interest in these corporations being retained under the terms of sale. A development of a different kind is seen in the three Prairie Provinces, where well-organized systems were sold to the Governments of Manitoba and Alberta in 1908 and to Saskatchewan in 1909. The lines in Ontario and Quebec are still largely owned by the Bell Telephone Co.

Telephone Systems.—The 2,399 telephone systems existing in 1931 (Table **72**) include the three large provincial systems in Manitoba, Saskatchewan and Alberta, and a smaller governmental system in Ontario, together with the system operated by the National Parks of Canada, Department of the Interior. There were also 138 municipal systems, the largest operated by the cities of Edmonton, Fort William and Port Arthur. Out of the 1,523 co-operative telephone companies, no fewer than 1,172 were in Saskatchewan alone and 204 in Nova Scotia. Besides the above, there were 506 stock companies, 99 partnerships and 126 private systems.

The steady growth of the use of telephones from 1911 is indicated in the summary statistics of Table **71**, showing an increase from 302,759 in 1911 to 1,364,200 in 1931, or from 4·2 to 13·1 telephones per 100 of the population. By provinces, the numbers of telephones in 1931 were as follows: Ontario 621,528, Quebec 300,502, British Columbia 128,646, Saskatchewan 82,875, Alberta 70,427, Manitoba 73,399, Nova Scotia 46,932, New Brunswick 33,950, Prince Edward Island 5,806 and Yukon 135. The numbers of instruments per 100 estimated population were as follows: British Columbia 18·5, Ontario 18·1, Saskatchewan 9·0, Alberta 9·6, Manitoba 10·5, Quebec 10·5, New Brunswick 8·3, Nova Scotia 9·1 and Prince Edward Island 6·6. In the proportion of telephones to population, Canada as a whole, with 13·1 telephones per 100 population, ranks second to the United States which has 16·4 telephones per 100 population.

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[1] Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics, which issues an annual report dealing with telephone statistics.

Estimates of the number of telephone conversations during 1931 were 2,532,443,000 local and 33,198,000 long-distance calls. These estimates were based on estimates made by systems operating almost 90 p.c. of all telephones in Canada; their estimates were based on actual counts made on days of normal business activity, and, after adjusting for uncompleted calls, holidays, Sundays, etc., the average was multiplied by 365. The long-distance calls in practically all cases were the actual long-distance calls put through or completed. The average was 1,856 local and 24 long-distance calls per telephone and 244 telephone conversations per capita as compared with an average of 253·6 in 1930. The estimated per capita average for the United States in 1930 was 226 and for New Zealand, 208·3.

Statistics of the number of telephone companies reporting to the Dominion Bureau of Statistics are given in Tables **72** and **73.**

71.—Progress of Telephones in Canada, years ended June 30, 1911-18, and Dec. 31, 1919-31.

Yr.	Capitalization.	Cost of Property.	Revenue.	Operating Expenses	Salaries and Wages.[1]	Companies.	Pole Line Mileage.	Telephones.	Employees.[2]	Telephones per 100 Population.
	$	$	$	$	$	No.	miles.	No.	No.	No.
1911	40,043,982	34,737,530	10,068,220	6,979,045	915,636	537	-	302,759	10,425	4·2
1912	46,276,852	56,887,799	12,273.627	9,094,689	2.659,642	683	-	370,884	12,783	5·0
1913	59,847,005	69,214,971	14,879,278	11,175,689	6,839,399	1,075	-	463,671	12,867	6·2
1914	70,291,884	80,258,356	17,297,269	12,882,402	8,250,253	1,136	-	521,144	16,799	6·8
1915	74,284,991	83,792,583	17,601,673	12,836,715	8,357,029	1,396	-	533,090	15,072	6·8
1916	76,920,314	88,520,020	18,594,268	11,147,201	7,852,719	1,592	-	548,421	15,247	6·8
1917	79,121,702	94,469,534	20,122,282	12,095,426	8,882,593	1,695	-	604,136	16,490	7·4
1918	85,274,691	104,368,628	22,753,280	13,644,518	10,410,807	2,007	-	662,330	17,336	8·0
1919	100,587,833	125,017,222	29,401,006	20,081,436	15,774,586	2,219	-	778,758	20,491	9·2
1920	116,689,705	144,560,969	33,473,712	28,044,401	17,294,405	2,327	161,270	856,266	21,187	9·9
1921	132,537,771	158,678,229	36,986,913	30,080,035	19,000,422	2,365	178,093	902,090	19,943	10·3
1922	143,802,023	167,332,932	39,559,149	29,966,181	17,305,759	2,387	184,147	944,029	19,321	10·6
1923	152,673,022	179,002,152	42,132,959	32,390,370	18,182,429	2,459	188,408	1,009,203	21,002	11·1
1924	160,015,020	193,884,378	44,322,598	33,615,686	18,293,234	2,466	193,399	1,072,454	21,685	11·6
1925	168,167,291	210,535,795	47,233,617	35,566,947	19,106,383	2,495	194,370	1,142,876	21,831	12·2
1926	179,151,098	227,155,900	50,522,859	38,141,360	25,219,493	2,479	201,604	1,201,008	23,083	12·8
1927	192,442,495	243,999,135	56,907,338	48,561,916	26,254,605	2,462	204,245	1,259,987	23,437	13·2
1928	207,441,866	263,201,651	61,791,333	51,542,544	28,501,378	2,447	207,566	1,334,534	24,373	13·8
1929	234,943,307	291,589,148	65,240,610	56,559,517	31,672,277	2,415	220,525	1,382,822	27,459	14·1
1930	258,188,983	319,101,191	69,420,459	61.886,340	32,085,948	2,414	222,113	1,402,861	26,575	14·1
1931	273,989,739	333,055,119	66,806,580	60,067,016	28,493,252	2,399	222,196	1,364,200	23,825	13·1

[1] Includes salaries and wages chargeable to capital account. [2] Exclusive of employees on rural lines in Saskatchewan.

72.—Number of Telephone Companies in Canada, by Provinces, Dec. 31, 1931.

Province.	Government. Prov.	Government. Dom.	Municipal.	Stock.	Co-operative.	Private.	Partnership.	Total.
Prince Edward Island	–	–	–	16	30	4	1	51
Nova Scotia	–	1	–	18	204	13	15	250
New Brunswick	–	1	–	18	–	3	5	26
Quebec	–	1	–	101	36	28	21	186
Ontario	2	1	127	316	42	63	44	595
Manitoba	1	–	8	1	8	6	6	30
Saskatchewan	1	1	1	19	1,172	3	–	1,196
Alberta	2	1	1	6	30	6	7	52
British Columbia	–	1	1	10	1	–	–	12
Yukon	–	–	–	1	–	–	–	1
Totals	**6**	**1**[1]	**138**	**506**	**1,523**	**126**	**99**	**2,399**

[1] This system is located in the provinces indicated.

73.—Number of Telephone Companies in Canada, 1911-31.[1]

Year.	Govt.	Municipal.	Stock	Co-operative.	Partnership.	Private.	Total.	Year.	Govt.	Municipal.	Stock.	Co-operative.	Partnership.	Private.	Total.
1911	3	25	308	101	18	82	537	1922	5	117	693	1,474	–	98	2,387
1912	3	35	368	133	31	113	683	1923	5	127	450	1,752	1	124	2,459
1913	4	52	543	262	63	151	1,075	1924	5	153	502	1,606	63	137	2,466
1914	4	58	611	297	48	118	1,136	1925	6	144	502	1,551	106	186	2,495
1915	4	62	584	601	28	117	1,396	1926	6	142	490	1,560	107	174	2,479
1916	4	67	622	765	23	111	1,592	1927	5	138	496	1,552	102	169	2,462
1917	5	73	645	841	17	114	1,695	1928	5	137	494	1,557	93	161	2,447
1918	5	74	735	1,085	12	96	2,007	1929	5	137	492	1,543	106	132	2,415
1919	5	89	666	1,346	18	95	2,219	1930	5	138	506	1,537	107	121	2,414
1920	5	88	647	1,495	9	83	2,327	1931	7	138	506	1,523	99	126	2,399
1921	5	103	614	1,544	7	92	2,365								

[1] The years 1911-18 are from July 1 to June 30. Figures for 1919 to 1931 are for the calendar years.

In the two following tables, figures are shown giving the number of telephones in use, the mileage of wire and the number of employees of telephone companies, by provinces, for the year 1931, and for the Dominion, from 1911 to 1931. Table 76 gives the financial statistics of Canadian telephone companies from 1912 to 1931.

74.—Telephones in Use, Mileage of Wire and Number of Employees, by Provinces, Dec. 31, 1931.

Province.	Telephones in Use. Business.	Telephones in Use. Residential.	Telephones in Use. Rural.	Telephones in Use. Public Pay.	Telephones in Use. Total.	Telephones in Use. Per 100 Population.	Mileage of Wire.	Employees.
	No.	No.	No.	No.	No.	No.	miles.	No.
P. E. Island	1,163	1,614	2,958	71	5,806	6·6	8,137	124
Nova Scotia	11,547	23,179	11,228	978	46,932	9·1	96,564	1,034
New Brunswick	8,718	17,032	7,558	642	33,950	8·3	61,743	778
Quebec	92,497	171,845	28,015	8,145	300,502	10·5	1,164,336	6,371
Ontario	156,529	336,911	116,774	11,314	621,528	18·1	2,273,843	9,750
Manitoba	21,314	37,264	12,758	2,063	73,399	10·5	320,059	1,154
Saskatchewan	16,843	18,649	47,096	287	82,875	9·0	382,342	775[1]
Alberta	21,628	32,129	15,834	836	70,427	9·6	299,589	1,295
British Columbia	39,042	85,130	3,244	1,230	128,646	18·5	377,897	2,544
Yukon	–	115	20	–	135	3·4	566	–
Totals	**369,281**	**723,868**	**245,485**	**25,566**	**1,364,200**	**13·1**	**4,985,076**	**23,825**

[1] Excluding employees on rural lines.

75.—Telephones in Use, Mileage of Wire and Number of Employees, 1911-31.[1]

Year.	Telephones in Use.						Mileage of Wire.	Employees.[2]
	Business.	Residential.	Rural.	Public Pay.	Total.	Per 100 Population.		
	No.	No.	No.	No.	No.	No.	miles.	No.
1911	–	–	–	–	302,759	4·2	687,782	10,425
1912	–	–	–	–	370,884	5·0	889,572	12,783
1913	–	–	–	–	463,671	6·2	1,092,587	12,867
1914	–	–	–	–	521,144	6·8	1,343,090	16,799
1915	–	–	–	–	533,090	6·8	1,452,360	15,072
1916	–	–	–	–	548,421	6·8	1,600,564	15,247
1917	–	–	–	–	604,136	7·4	1,708,203	16,490
1918	–	–	–	–	662,330	8·0	1,848,466	17,336
1919	–	–	–	–	778,758	9·2	2,105,240	20,491
1920	260,481	390,930	204,855	–	856,266	9·9	2,105,101	21,187
1921	273,498	396,384	232,208	–	902,090	10·3	2,268,271	19,943
1922	281,535	414,887	247,607	–	944,029	10·6	2,396,805	19,321
1923	303,660	444,300	261,360	–	1,009,320	11·1	2,574,083	21,002
1924	281,108	509,928	265,509	15,909	1,072,454	11·6	2,765,722	21,685
1925	297,875	556,837	268,807	19,357	1,142,876	12·2	3,020,773	21,831
1926	311,557	597,429	270,686	21,336	1,201,008	12·8	3,306,214	23,083
1927	324,425	637,536	275,544	22,482	1,259,987	13·2	3,591,035	23,437
1928	345,771	684,820	280,878	23,065	1,334,534	13·8	3,982,867	24,373
1929	366,418	724,001	269,487	22,916	1,382,822	14·1	4,486,213	27·459
1930	373,387	740,050	264,681	24,743	1,402,861	14·1	4,790,224	26,575
1931	369,281	723,868	245,485	25,566	1,364,200	13·1	4,985,476	23,825

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[1] Figures for the years 1911-18 are from July 1 to June 30; those for 1919-31 are for calendar years.
[2] Excluding employees on rural lines in Saskatchewan.

76.—Financial Statistics of Canadian Telephone Companies, 1912-31.[1]

Year.	Capital Stock.	Funded Debt.	Cost of Property and Equipment.	Salaries and Wages.[2]	Gross Revenue.	Operating Expenses.	Net Operating Revenue.
	$	$	$	$	$	$	$
1912	21,533,605	24,743,247	56,887,799	2,659,642	12,273,627	9,094,689	3,178,938
1913	26,590,501	33,256,503	69,214,971	6,839,309	14,897,278	11,175,689	3,721,589
1914	28,644,340	41,647,554	80,258,356	8,250,253	17,297,269	12,882,402	4,414,867
1915	28,947,122	45,337,869	83,792,583	8,357,029	17,601,673	12,836,715	6,764,958
1916	29,416,956	47,503,358	88,520,021	7,852,719	18,594,268	11,147,201	7,447,067
1917	29,476,367	49,645,335	94,469,534	8,882,593	20,122,282	12,095,426	8,026,856
1918	29,803,090	55,471,601	104,368,627	10,410,807	22,753,280	13,644,524	9,108,756
1919	35,227,233	65,360,600	125,017,222	15,774,586	29,401,006	20,081,436	9,319,570
1920	36,149,838	80,539,367	144,560,969	17,294,405	33,473,712	28,044,401	5,429,311
1921	42,194,426	90,343,345	158,678,229	19,000,422	36,986,913	30,080,035	6,906,878
1922	48,968,198	94,833,825	167,332,932	17,305,759	39,559,149	29,966,181	9,592,968
1923	57,366,675	95,306,347	179,002,152	18,182,429	42,132,959	32,390,370	10,266,285
1924	63,798,133	96,216,887	193,884,378	18,293,234	44,322,598	33,615,686	10,706,912
1925	65,514,130	102,653,161	210,535,795	19,106,383	47,233,617	35,566,947	11,666,670
1926	68,345,999	110,805,099	227,155,900	25,219,493	50,522,859	38,141,360	12,381,499
1927	76,460,540	115,981,955	243,999,135	26,254,605	56,907,338	48,561,916	8,345,422
1928	85,913,239	121,528,627	263,201,651	28,501,378	61,791,333	51,542,544	10,248,789
1929	93,737,979	141,205,328	291,589,148	31,672,277	65,240,610	56,559,517	8,681,093
1930	102,777,267	155,411,716	319,101,191	32,085,948	69,420,459	61,886,340	7,534,119
1931	105,765,685	168,224,084	333,055,119	28,493,252	66,806,580	60,067,016	6,739,564

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[1] Figures for the years 1912-18 are from July 1 to June 30; those for 1919-31 are for calendar years.
[2] Includes salaries and wages chargeable to capital accounts.

PART XII.—RADIO.[1]

Under the Radiotelegraph Act (c. 195, R.S.C., 1927), the administration of radio within the Dominion was vested in the Department of Marine, now under the jurisdiction of the Hon. Alfred Duranleau, Minister. The matter of Dominion jurisdiction has been questioned by certain of the provinces from time to time, but on Feb. 9, 1932, the Judicial Committee of the Imperial Privy Council ruled that the control and regulation of radio communication is within the jurisdiction of the Dominion Parliament. This decision was a very important one and has done much to further the nationalization of radio broadcasting in Canada. (See pp. 731-733).

Section 1.—Radiotelegraphy.

The Coast Station Radiotelegraph System.—The present coast station system of 65 stations consists of three chains—one extending from Vancouver to Prince Rupert on the Pacific, another from Port Arthur to the Atlantic ocean in the east, and the third from Port Churchill to Resolution island at the entrance to Hudson strait. The Great Lakes coast stations connect with those of the east coast, which, in turn, connect with the Hudson Bay route chain. There is no direct radio connection between the Great Lakes and the Pacific Coast chains.

Of the above stations, 17 on the east coast and Great Lakes are operated by the Canadian Marconi Co. under contract with the Department, and the remaining 48 on the east coast, west coast and Hudson bay and strait are operated directly by the Department. Twice daily, at advertised hours, a number of these stations broadcast messages to shipping containing such important information as weather forecasts, storm warnings, reports in connection with floating derelicts, ice and other dangers to navigation. In the interests of navigators, to whom accurate time is essential in computing observations on celestial bodies, three Canadian coast stations—two on the west coast and one on the east coast—transmit time signals at advertised hours daily.

Some years ago the discrimination of underwriters in the matter of insurance rates charged on ships plying to Canadian ports led the Department to feel that any reasonable expenditure which would tend to reduce these charges would be a sound investment. To this end 12 direction-finding stations have been established at specially selected sites with respect to navigational routes—7 on the east coast, 4 on the Hudson bay and strait, and 1 on the west coast. These stations are fitted with special apparatus which enables the direction of the incoming radio signal transmitted by a ship to be accurately determined. It is the expressed opinion of many master mariners that Canadian direction-finding stations set a standard for accuracy and efficiency.

A more recent extension of the shore direction finder is the development of the direction-finding instrument on board ship. To assist this development, the Department has established radio beacon transmitters at a number of lighthouses and lightships (see Table 77). These radio beacons transmit characteristic radio signals with an approximate range of 50 miles every hour at advertised times during clear weather and continuously when the atmosphere in the vicinity of the station is so obscure as to impede navigation.

To insure the safety of life at sea, all passenger steamers and freighters plying to and from Canadian ports must carry radio equipment manned by competent operators in possession of a certificate of proficiency in radio. The Department maintains a complete radio inspection service to enforce this regulation. Inspectors located at various ports throughout the Dominion are responsible for checking the efficiency of the radio equipment on ships of all nationalities, and seeing that only competent operators are carried. Examinations for certificates of proficiency in radio are conducted by the Radio Branch, and 3,532 certificates have been issued up to Mar. 31, 1932.

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[1] Sections 1 and 2 have been revised by Commander C. P. Edwards, O.B.E., Director, Radio Service, Department of Marine, Ottawa. A fuller treatment of the historical and descriptive background of radio communication was published at pp. 607-610 of the 1932 Year Book.

Table 77 shows the name and situation of the Government-owned radiotelegraph stations in Canada and Newfoundland.

77.—Government-Owned Radio Stations in Canada, fiscal year ended Mar. 31, 1932.[1]

Name of Station.	Situation.
East Coast.	
Belle Isle, Nfld.[2]	Belle Isle Straits.
Cape Race, Nfld.[2]	Newfoundland.
Chebucto Head, N.S.[2]	Entrance Halifax Harbour.
Clarke City*	Gulf of St. Lawrence.
Fame Point, Que.*	" "
Father Point, Que.*	" "
Grindstone Island, Que.*	Magdalen Islds.
Halifax Dockyard	Halifax, N.S
Montreal, Que.*	St. Lawrence River.
North Sydney*	Cape Breton, N.S.
Point Amour, Nfld.*	Gulf of St. Lawrence.
Quebec, Que.*	St. Lawrence River.
Sable Island*	North Atlantic.
Saint John, N.B.[2]	Red Head, N.B.
Yarmouth, N.S.[2]	Nova Scotia.
DIRECTION-FINDING STATIONS.	
Belle Isle D/F	Belle Isle Straits.
Canso D/F	Nova Scotia.
Cape Race D/F	Newfoundland.
Chebucto Head D/F	Entrance Halifax Harbour.
Saint John D/F	Red Head, N.B.
Saint Paul D/F	Nova Scotia.
Yarmouth D/F	Nova Scotia.
RADIO BEACON STATIONS.	
Cape Whittle	Gulf of St. Lawrence.
West Point	Anticosti.
Pointe des Monts	Gulf of St. Lawrence.
Cape Bauld	N.W. Newfoundland.
Cape Ray	S.W. Newfoundland.
Heath Point Lightship	Heath Point, Anticosti.
Lurcher Lightship	Off Yarmouth, N.S.
Sambro Lightship	Off Halifax, N.S.
Seal Island	S.E. of Nova Scotia.
Great Lakes.	
Kingston, Ont.*	Barriefield Common.
Midland, Ont.*	Georgian Bay.
Point Edward, Ont.*	Lake Huron.
Port Arthur, Ont.*	Port Arthur.
Port Burwell, Ont.*	Lake Erie.
Sault Ste. Marie, Ont.*	Sault Ste. Marie, Ont.
Tobermory, Ont.*	Entrance Georgian Bay, Ont.
Toronto, Ont.*	Toronto Island
RADIO BEACON STATIONS.	
Southeast Shoal	Lake Erie.
Main Duck	Lake Ontario
Long Point	Lake Erie.
Michipicoten Island	Lake Superior
Cove Island	Lake Huron.
Hudson Bay and Hudson Strait.	
Cape Hopes Advance, Que.[2]	Hudson Strait.
Nottingham Island[2]	Hudson Strait.
Port Churchill, Man.[2]	Hudson Bay.
Resolution Island[2]	Hudson Strait.
Chesterfield Inlet	Hudson Bay.
DIRECTION-FINDING STATIONS.	
Cape Hopes Advance	Hudson Strait.
Nottingham Island	Hudson Strait.
Port Churchill, Man.	Hudson Bay.
Resolution Island	Hudson Strait.
Northwest Territories.	
Coppermine	Coronation Gulf.
West Coast.	
Alert Bay	Cormorant Island, B.C.
Bull Harbour	Hope Island, Vancouver Is.
Cape Lazo	Strait of Georgia, near Comox, B.C.
Dead Tree Point[3]	South of Graham Island, Queen Charlotte Islands.
Digby Island, B.C.	Entrance Prince Rupert Harbour.
Estevan, B.C.	West Coast, Vancouver Is.
Gonzales Hill, B.C.	Victoria, B.C.
Merry Island, B.C.	British Columbia.
Pachena Point[2]	West Coast, Vancouver Is.
Point Grey, B.C.	Entrance Vancouver Harbour.
Vancouver	Merchants Exchange, Vancouver.
DIRECTION-FINDING STATIONS.	
Pachena Point D/F	West Coast, Vancouver Is.
RADIO BEACON STATIONS.	
Race Rocks	Near Victoria, B.C.
Langara	Langara Island, Q.C.I.
Dead Tree Point	South of Graham Island, Q.C.I.
Quatsino	West Coast, V.I. (Kains Is.).
Triple Island	Triple Islets Group, B.C.
LIFE-SAVING STATIONS.	
Banfield, B.C.	West Coast, Vancouver Is.
Carmanah, B.C.	" "
Cape Beale, B.C.	" "
Pachena, B.C.	" "

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[1] Of these Government-owned stations some only are operated by the Government. The rest are operated by the Marconi Co. and are indicated by an asterisk (*).

[2] This is the same station as that listed under Direction-Finding Stations, but is included under two headings to indicate its two functions. It is counted only as a D/F station in the summary in Table 79.

[3] Also included under Radio Beacon Stations to show its double function.

Table 78 gives the number of messages and words handled and the cost of maintenance for the Government stations of the east coast, the west coast, the Great Lakes, the Hudson bay and Hudson strait. For the year 1931-32, the total number of messages was 307,869, as compared with 396,727 in 1930-31, 440,912 in 1929-30, 456,239 in 1928-29, 404,144 in 1927-28 and 402,023 in 1926-27, and of words handled 6,936,062, as compared with 8,534,982 in 1930-31, 9,167,302 in 1929-30, 8,942,945 in 1928-29, 7,695,757 in 1927-28 and 7,347,794 in 1926-27.

78.—Business and Cost of Maintenance of Radiotelegraph Stations for the fiscal years ended Mar. 31, 1931 and 1932.

Station.	1931.			1932.		
	Messages Handled.	Words Handled.	Cost of Maintenance.	Messages Handled.	Words Handled.	Cost of Maintenance.
	No.	No.	$	No.	No.	$
East Coast	119,651	2,496,089	212,838	99,979	2,203,391	209,500
Great Lakes	27,782	431,019	79,294	21,220	332,868	78,978
West Coast	223,574	4,680,209	134,043	156,690	3,288,519	145,875
Hudson Bay and Strait	25,720	927,665	82,470	29,980	1,111,284	76,751
Totals	**396,727**	**8,534,982**	**508,645**	**307,869**	**6,936,062**	**511,104**

Section 2.—Radiotelephony.

Transatlantic Radiotelephone Service.—A radiotelephone service between Canada and Great Britain was first made available to the Canadian public, through the medium of the Bell Telephone Co. *via* the transatlantic radio circuit operated by the American Telegraph and Telephone Co. from New York, in March, 1928.

In 1932 a direct circuit with Great Britain was opened through the medium of the beam station of the Canadian Marconi Company at Drummondville, P.Q.

Approximately $250,000 is expended annually by the Radio Branch of the Department of Marine for the suppression of inductive interference in the interests of broadcast listeners. This service is entirely free. Upwards of 100 men and 24 fully equipped cars are engaged in this work. Radio broadcasting throughout the Dominion is at present carried on by private enterprise.

Radio Broadcasting.—Broadcasting of the human voice by radio first commenced in Canada with test programs carried out by the Canadian Marconi Company in Montreal during the winter evenings of 1919. Regular organized programs were commenced in December, 1920, by the same company, on a wavelength of 1,200 metres.

In April, 1922, the establishment of broadcasting stations on a general scale commenced, 52 private, commercial and amateur broadcasting licences being granted during the fiscal year 1922-23. During the fiscal year 1931-32, 66 broadcasting stations were in operation in the Dominion, and the number of licensed receiving sets was 598,358. The licence fee for a broadcasting station is $50 per annum, and for a receiving set $2 per annum.

The increasing popularity of radio receiving sets for "listening in" on broadcasted musical programs and news, is indicated by the number of such sets licensed in Canada (private receiving stations in Table **79**) which have grown from 9,956 in the fiscal year ended Mar. 31, 1923, to 598,358 in 1932. In the latest year the total was divided among the provinces as follows: Ontario, 285,048; Quebec, 127,804; Saskatchewan, 31,487; Manitoba, 35,262; British Columbia, 55,534; Alberta, 27,481; Nova Scotia, 21,109; New Brunswick, 13,256; Prince Edward Island, 1,189; Northwest Territories and Yukon, 188. In the calendar year 1930, the sales in Canada of radio sets numbered 223,228, valued at $22,776,225. Complete sets manufactured numbered 170,082, valued at $19,196,936.

The wireless and radio stations at present operating in Canada are summarized in Table **79.**

79.—Wireless and Radio Stations in Operation in Canada, Mar. 31, 1928-32.

Class of Station.	1928.	1929.	1930.	1931.	1932.
Coast Stations (Government-owned)	33	30	28	29	29
Direction-Finding Stations (Government-owned)	8	11	12	12	12
Ship Stations (Government-owned)	33	37	44	47	50
Radio Beacon Stations (Government-owned)	8	8	15	19	20
Radiophone Stations (Government-owned)	4	4	4	4	5
Land Stations	27	27	1	1	1
Ship Stations (commercial)	279	296	275	272	241
Limited Coast Stations	3	3	4	4	4
Public Commercial Stations	7	4	47	50	32
Private Commercial Stations	77	98	138	131	112
Private Commercial Broadcasting Stations	84	79	81	80	77
Experimental Stations	42	46	71	91	107
Amateur Experimental Stations	532	584	610	728	898
Amateur Broadcasting Stations	15	12	10	8	7
Private Receiving Stations	268,420	297,398	424,146	523,100[1]	598,358[1]
Radio Training Schools	9	5	6	6	5
Licensed aircraft	-	2	3	-	1
Totals	**269,581**	**298,644**	**425,495**	**524,582**	**599,959**

[1] Includes 873 licences issued free to the blind.

Section 3.—The Canadian Radio Broadcasting Commission.[1]

The adoption of a policy of national radio broadcasting, in 1932, followed upon two extensive investigations into the radio broadcasting situation in Canada; one by a Royal Commission in 1929, and one by a special committee of the House of Commons in 1932. The Royal Commission, of which Sir John Aird was chairman, not only examined the Canadian situation but also surveyed the radio broadcasting systems obtaining in the United States, Great Britain, and certain European countries. Its report, which was presented to the Government in September, 1929, recommended the creation of a national radio broadcasting monopoly in Canada to be operated by a corporation owned by the Dominion Government. One of the principal considerations guiding the commission's report was the desirability of providing a broadcasting service in Canada adapted to the special requirements of the country and free from external influence.

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[1] Supplied by courtesy of Hector Charlesworth, Chairman Radio Broadcasting Commission.

No action on the report of the Royal Commission was taken at the regular session of 1930, and it was not until the session of 1932 that the report received parliamentary consideration, following the decision of the Imperial Privy Council which held that radio broadcasting in Canada came within Dominion rather than provincial jurisdiction. Then the House of Commons, on the motion of the Prime Minister, the Right Honourable R. B. Bennett, appointed a committee to consider and advise upon the broadcasting question. This committee, of which the Honourable Raymond D. Morand was chairman, was instructed: (1) "To consider the report of the Aird Commission"; (2) "To advise and recommend a complete technical scheme for radio broadcasting for Canada so designed as to ensure from Canadian sources as complete and satisfactory a service as the present development of radio science will permit"; and (3) "To investigate and report upon the most satisfactory agency for carrying out such a scheme".

In the final report, presented to the House of Commons on May 9, 1932, the committee outlined its conception of the place of radio broadcasting in the national life in the following terms: "Your committee was seized, from the inception, of the national importance and international character of radio broadcasting, and the evidence submitted has served to further consolidate our opinion of the far-reaching scope and benefits of proper, well-regulated broadcasting service throughout Canada as a medium of education, thought-provoking development, and fostering of Canadian ideals and culture, entertainment, news service, and publicity of this country and its products, and as an auxiliary to religious and educational teaching, also as one of the most efficient mediums for developing a great National and Empire consciousness within the Dominion and the British Commonwealth of Nations".

After paying tribute to the existing commercial radio broadcasting stations for the services they had rendered, the committee stated its conviction that the existing system did not ensure the maximum benefits of radio broadcasting. The change that had taken place in the science of radio broadcasting and in the financial condition of the country subsequent to the presentation of the Aird Report was mentioned by the committee in connection with its inability to completely accept the recommendations contained in that report. The committee recommended the creation of a national broadcasting system, including a chain of high-power stations located at suitable intervals across the country with a number of supplementary stations of lower power. It recommended that the national broadcasting system be controlled and operated by a commission to be known as the Canadian Radio Broadcasting Commission and consisting of a chairman, a vice-chairman, and a third commissioner, holding office for ten, nine, and eight years respectively. The committee proposed that this commission should be vested with the necessary powers: to carry on the business of broadcasting in Canada, including power to regulate and control all broadcasting; to own, build and operate stations; to acquire by lease, purchase, expropriation, or otherwise, any or all existing broadcasting stations; to enter into operating agreements with privately-owned stations; to prohibit the establishment of privately-owned chains of stations; to take over, subject to the approval of Parliament, all broadcasting in Canada; and to perform other functions necessary to the creation and operation of a national broadcasting system.

Regarding the financing of the proposed national system the committee recommended that it be self-sustaining and that only the money accruing from transmitters' and receivers' licence fees and advertising income be available for it.

The report of the committee, which was unanimous, was adopted without opposition in the House of Commons and a bill based upon it was introduced by the Prime Minister at the same session of Parliament. The Canadian Radio Broadcasting Act, 1932, was passed without opposition, and provided for the appointment of a commission as proposed by the committee and vested certain powers in the commission, some of which powers were subject to the approval of the Governor in Council, and some to the approval of Parliament.

Under authority of this Act, a commission of three members was appointed in the autumn of 1932, the personnel being Hector Charlesworth, Chairman; Thomas Maher, Vice-Chairman, and Lieut.-Col. W. Arthur Steel, Commissioner. The chairman and the vice-chairman took office on Dec. 1, 1932, but, owing to absence in Europe at the International Radio Conference at Madrid, Colonel Steel did not assume office until the middle of January, 1933.

Although the commission was not formally established in office and had hardly commenced the creation of its organization, it took charge of Canada's part in the first intra-Empire broadcast arranged by the British Broadcasting Corporation for Christmas Day, 1932, in which all the principal parts of the Empire exchanged greetings and received a message from His Majesty to his subjects throughout the world. This ambitious enterprise was carried out with complete success.

Without the use of transcontinental transmission wires and broadcasting stations, the commission could not at the outset engage in national broadcasting on a substantial scale. Pending the conclusion of negotiations for the leasing of wires and arrangements for the broadcasting of commission programs by commercial stations, the commission endeavoured to augment the existing broadcasting service by providing occasional broadcasting programs of a national character through temporary arrangements with wire companies and commercial broadcasting stations. Commencing with two programs a week, by May 1, 1933, it was broadcasting national programs on a trans-Canada network seven days a week, each of these programs being one hour long. At that time negotiations for the use and control of transcontinental wires for a fixed period of several hours each day and for the regular broadcasting of commission programs by commercial stations were approaching conclusion. These arrangements were designed to enable the commission to broadcast nationally and regionally for some hours every day, its operations in this connection being restricted by the amount of money available for its purposes. In April, 1933, the commission had secured the nucleus of a national network of stations of its own by taking over and operating the three stations of the Canadian National Railways at Moncton, Ottawa, and Vancouver. Subject to its finances permitting, it planned to commence during the year the construction of one or two high-power stations in Western Canada. In the meantime the commission began to discharge other functions assigned to it by Parliament, including the application of the statutory provision for the restriction of the advertising content of all commercial programs. At the parliamentary session of 1933 the Act creating the commission was amended to remove certain restrictions on the commission in regard to the selection of the personnel of its organization and to provide that it might function in certain respects with the approval of the Governor in Council instead of the approval of Parliament.

PART XIII.—THE POST OFFICE.

Historical.—A postal service was established between Montreal and Quebec as early as 1721, official messengers and other travellers making a practice of carrying letters for private persons. When Canada came under British rule, the Post Office was placed on a solid footing by Benjamin Franklin, then Deputy Postmaster General for the American colonies, who visited Canada in 1763, opened post offices at Quebec, Montreal and Three Rivers, and also established courier communication between Montreal and New York. Since 1755 Halifax had had a post office and direct postal communication with Great Britain.

As a consequence of the American Revolution and the resulting isolation of Canada from Nova Scotia, the first exclusively Canadian postal service, a monthly courier route from Halifax to Quebec, was established in 1788, involving a seven weeks' trip and expenses of about £200 of which only one-third was met by postal charges. Up to 1804 the postal facilities of Upper Canada consisted of one regular trip by courier each winter with whatever mail might reach Montreal during the season of navigation. Charges were necessarily high, $1.12 being paid on ordinary letters from London to Toronto *via* Halifax.

The first post office in Toronto was opened about 1800. By 1816 there were 19 offices in the two Canadas and by 1827 this number had increased to 114. At this time the system consisted primarily of a trunk line of communication between Halifax, Quebec, Montreal, Toronto and Amherstburg, over which couriers travelled at varying intervals. Branching off this line were routes to Sorel, Sherbrooke, St. Johns, Hull, Hawkesbury, Perth and Richmond, with most deliveries made once or twice a week.

Hitherto the Post Office had been under the control of the Imperial Department, but considerable agitation resulted in the service being transferred on April 6, 1851, to the several provinces. Only enough mutual control was maintained to insure the continuance of Imperial and intercolonial services. The provinces had complete jurisdiction over the establishment and maintenance of systems and rates.

At Confederation the provincial systems were transferred to the Dominion. The Post Office Act of 1867 established a service throughout Canada. The domestic rate on letters was reduced from 5 to 3 cents per half-ounce, and in 1870 the rates to the United States and the United Kingdom were reduced from 10 to 6 cents and from 12½ to 6 cents respectively per half-ounce. In 1875 a convention between Canada and the United States reduced postal rates between the countries to the domestic level. In 1878, on the admission of Canada to the Postal Union, letter postage to the countries of the Postal Union was reduced to 5 cents per half-ounce. After a conference in 1897 Imperial penny postage (2 cents per half-ounce) was established on Dec. 25, 1898, while the domestic rate was reduced from 3 to 2 cents per ounce. These rates were maintained until 1915, when a 1-cent war tax was imposed on all pay letters and post cards (except where this would be in violation of international agreements), and also on postal notes. Later the rate to Great Britain was increased to 4 cents on the first and 3 cents on succeeding ounces, while that to Postal Union countries was raised to 10 cents on the first and 5 cents on succeeding ounces. The Postal Union rate was reduced in October, 1925, to 8 cents for the first ounce and 4 cents for subsequent ounces. Penny postage again became effective for Canada, to the United States, Newfoundland and other countries of North America on July 1, 1926, and to the United Kingdom and all other places within the British Empire on Dec. 25, 1928. On May 24, 1929, penny postage became effective to France and, on Dec. 25, 1929, was extended to all places in South America. On July 1, 1930, the rate to other Postal Union countries was made 5 cents for the first ounce and 3 cents for each succeeding ounce. On July 1, 1931, a special revenue tax imposed by the Government for the purpose of obtaining additional revenue, came into effect on letters addressed to places in Canada, throughout the Empire, to France and to North and South America generally, making the rate in these cases 3 cents for the first ounce and 2 cents for each succeeding ounce.

The Post Office Department is administered by the Postmaster General. Besides the several administrative branches at Ottawa, the Dominion is divided into 15 districts, each in charge of a Superintendent of Postal Service. The Canadian system embraces a territory more extensive than that served by any other system, excepting those of the United States and Russia, though the sparsity of population and the comparative lack of development make inevitable a peculiarly difficult and expensive service.

Rural Mail Delivery.—A system of rural mail delivery was inaugurated in Canada on Oct. 10, 1908, limited at that time to existing stage routes, persons residing on such routes being entitled to have mail boxes put up in which the mail carrier was to deposit mail matter and from which he was to collect mail matter and carry it to the post office. As a consequence of the public approval of this scheme, new Regulations, taking effect on April 1, 1912, made all persons residing in rural districts along and contiguous to well-defined main thoroughfares of one mile and upwards eligible to receive their mail in this manner, while couriers on rural mail routes were also required to sell postage stamps and take applications, and accept money, for money orders and postal notes. The result has been an increase in the number of rural routes from approximately 900 in 1912 to 4,315 in 1932, having 235,755 mail boxes as against approximately 25,000 in 1912. The establishment of these routes has been an important factor in the amelioration of the conditions of Canadian rural life.

Statistics.[1]—Tables **80** to **82** show the number of post offices in operation in Canada in the latest six years, the gross revenue in all offices collecting $10,000 and upwards in 1931 and 1932, and the net revenue and expenditure of the Department in various years since 1890.

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[1] Revised as to financial transactions by H. E. Atwater, Financial Superintendent, Post Office Department.

80.—Number of Post Offices in Operation, by Provinces, Mar. 31, 1927-32.

Province.	1927.	1928.	1929.	1930.	1931.	1932.
Prince Edward Island	130	128	127	126	125	116
Nova Scotia	1,778	1,771	1,770	1,762	1,751	1,673
New Brunswick	1,113	1,114	1,079	1,062	1,041	1,025
Quebec	2,463	2,514	2,528	2,519	2,516	2,451
Ontario	2,614	2,604	2,586	2,575	2,576	2,522
Manitoba	817	817	816	815	818	781
Saskatchewan	1,428	1,428	1,423	1,430	1,448	1,424
Alberta	1,195	1,200	1,189	1,191	1,224	1,200
British Columbia	867	866	876	892	890	905
Yukon	20	20	20	20	21	19
Northwest Territories	15	15	16	17	17	17
Totals	**12,440**	**12,478**	**12,430**	**12,409**	**12,427**	**12,133**

81.—Statistics of Gross Postal Revenue of Offices Collecting $10,000 and upwards, fiscal years ended Mar. 31, 1931-32.

Name of Post Office.	1931.	1932.
	$	$
P.E. Island.		
Charlottetown	66,394	76,364
Summerside	20,696	24,911
Totals for Province	**161,026**	**179,860**
Nova Scotia.		
Amherst	31,821	35,466
Antigonish	14,098	15,866
Bridgewater	17,803	18,824
Digby	11,256	11,853
Glace Bay	16,745	18,028
Halifax	513,143	527,554
Kentville	19,269	21,529
Liverpool	14,454	14,803
Lunenburg	13,470	14,548
New Glasgow	38,256	41,737
North Sydney	16,589	17,612
Pictou	13,237	14,315
Springhill	14,116	13,194
Stellarton	11,091	11,993
Sydney	64,067	67,152
Truro	54,885	57,778
Windsor	18,421	20,016
Wolfville	13,924	16,012
Yarmouth	30,343	32,810
Totals for Province	**1,401,929**	**1,486,815**
New Brunswick.		
Bathurst	12,908	13,483
Campbellton	23,284	25,198
Chatham	13,164	13,942
Dalhousie	11,431	11,033
Edmundston	16,678	17,540
Fredericton	70,579	75,602
Moncton	510,258	467,917
Newcastle	11,760	12,952
Saint John	270,877	297,968
St. Stephen	17,930	19,697
Sackville	17,990	20,460
Sussex	16,563	17,384
Woodstock	20,566	20,891
Totals for Province	**1,331,383**	**1,342,720**
Quebec.		
Amos	9,139	10,723
Beauharnois	9,504	12,998
Buckingham	10,015	11,151
Chicoutimi	32,860	32,337
Coaticook	12,524	13,979
Drummondville East	22,160	26,873
Farnham	11,967	13,860
Granby	22,620	28,551
Grand'Mère	11,276	12,124
Hull	28,181	32,302
Joliette	21,916	25,702
Lachute	9,251	10,183
Lac Mégantic	9,645	10,343
La Tuque	12,080	13,949
Lennoxville	9,656	10,875
Lévis	23,018	24,522
Magog	11,328	12,662
Montmagny	10,636	11,462
Montreal	4,725,519	4,629,518
Quebec	612,291	651,283
Rimouski	16,188	17,040
Rock Island	8,889	10,646
Rouyn	9 485	10,618
Ste. Agathe des Monts	11,325	12,724
St. Hyacinthe	34,462	41,318
St. Johns	27,714	30,519
St. Jérôme	15,991	18,036
Shawinigan Falls	24,941	25,538
Sherbrooke	116,456	123,624
Quebec—concluded.		
Sorel	15,060	15,817
Thetford Mines	19,002	20,136
Three Rivers	76,859	80,359
Valleyfield	13,441	17,325
Victoriaville	19,636	22,744
Totals for Province	**7,431,940**	**7,544,313**
Ontario.		
Amherstburg	10,420	11,059
Arnprior	14,596	16,221
Aurora	17,579	14,960
Aylmer West	12,307	13,121
Barrie	28,535	33,655
Belleville	62,799	69,701
Bowmanville	13,752	15,999
Bracebridge	13,584	15,204
Brampton	25,660	28,954
Brantford	142,550	154,435
Brockville	48,787	56,279
Burlington	8,947	11,057
Campbellford	9,171	10,524
Carleton Place	15,916	16,968
Chatham	67,001	74,484
Clinton	9,132	10,505
Cobalt	18,692	18,605
Cobourg	36,930	39,627
Cochrane	19,812	22,302
Collingwood	18,788	19,883
Copper Cliff	12,575	10,843
Cornwall	39,363	45,422
Dundas	15,367	16,937
Dunnville	19,349	23,913
Fergus	16,236	18,849
Fort Erie North	24,958	26,573
Fort Frances	19,215	20,364
Fort William	77,492	83,225
Galt	63,941	68,180
Gananoque	18,233	19,934
Georgetown	12,493	15,780
Goderich	16,636	18,828
Gravenhurst	10,178	11,808
Grimsby	11,332	13,038
Guelph	97,719	106,677
Haileybury	11,525	12,867
Hamilton	621,721	658,566
Hanover	14,904	16,054
Hawkesbury	10,148	11,088
Hespeler	10,365	10,922
Huntsville	14,336	15,890
Ingersoll	22,758	24,913
Kapuskasing	13,218	13,318
Kenora	23,526	25,680
Kincardine	14,591	18,094
Kingston	112,362	125,134
Kirkland Lake	25,742	37,534
Kitchener	139,275	143,339
Leamington	19,314	21,327
Lindsay	36,064	39,053
Listowel	15,126	14,795
London	513,111	524,034
Meaford	10,069	10,953
Midland	20,540	22,806
Napanee	19,949	23,427
New Liskeard	20,154	23,151
Newmarket	16,687	19,711
Niagara Falls	137,953	136,699
North Bay	63,401	69,590
Oakville	16,436	18,902
Orangeville	12,203	13,484
Orillia	37,299	42,627
Oshawa	94,785	96,571
Ottawa	652,385	725,472

81.—Statistics of Gross Postal Revenue of Offices Collecting $10,000 and upwards, fiscal years ended Mar. 31, 1931-32—concluded.

Name of Post Office.	1931.	1932.
Ontario—concluded.	$	$
Owen Sound	49,914	54,323
Paris	24,221	25,597
Parry Sound	13,926	16,074
Pembroke	31,123	33,180
Perth	28,927	29,602
Peterborough	114,933	124,585
Petrolia	11,812	12,462
Picton	17,761	19,698
Port Arthur	56,522	62,584
Port Colborne	23,817	23,101
Port Hope	20,553	22,621
Prescott	16,423	15,364
Preston	22,301	25,868
Renfrew	26,703	30,719
St. Catharines	99,104	109,416
St. Marys	16,174	17,858
St. Thomas	61,422	65,966
Sarnia	63,841	69,933
Sault Ste. Marie	67,576	68,807
Seaforth	9,666	10,486
Simcoe	36,475	40,573
Smiths Falls	26,291	27,509
Stratford	66,940	73,414
Strathroy	12,424	13,595
Sudbury	79,086	75,493
Thorold	11,306	11,406
Tillsonburg	14,856	17,284
Timmins	36,645	48,979
Toronto	6,924,340	7,356,069
Trenton	20,491	22,021
Walkerton	11,328	12,524
Wallaceburg	13,243	13,916
Waterloo	44,710	49,091
Welland	40,503	41,821
Weston	24,408	24,346
Whitby	14,090	14,865
Windsor	447,319	451,515
Wingham	11,395	12,015
Woodstock	56,551	57,979
Totals for Province	**14,292,437**	**15,302,577**
Manitoba.		
Brandon	102,806	99,432
Dauphin	21,476	24,341
Flin Flon	10,070	10,278
Neepawa	10,548	11,875
Portage la Prairie	27,982	29,882
St. Boniface	17,992	16,930
The Pas	19,441	19,369
Wawanesa	11,029	13,802
Winnipeg	3,247,674	3,114,066
Totals for Province	**3,994,111**	**3,888,853**
Saskatchewan.		
Assiniboia	10,702	9,743
Biggar	10,511	11,181
Estevan	19,114	18,589
Humboldt	12,192	12,648
Lloydminster	12,632	14,347
Melfort	14,574	15,234
Melville	14,866	14,153
Moose Jaw	118,831	113,634
North Battleford	30,919	34,045
Prince Albert	51,725	54,268
Regina	922,395	946,350
Rosetown	10,897	10,852
Saskatoon	339,841	342,953
Saskatchewan—con.	$	$
Shaunavon	12,746	10,086
Swift Current	35,555	32,466
Tisdale	9,712	10,824
Weyburn	27,892	25,189
Yorkton	31,517	30,641
Totals for Province	**2,860,172**	**2,893,555**
Alberta.		
Banff	17,084	17,854
Calgary	646,100	627,723
Camrose	15,199	16,038
Drumheller	19,376	20,521
Edmonton	517,593	554,472
Grande Prairie	12,093	11,718
Lacombe	10,598	11,476
Lethbridge	73,471	75,460
Medicine Hat	40,109	40,821
Red Deer	18,303	20,364
Vegreville	10,654	11,408
Vermilion	10,090	11,498
Wetaskiwin	13,742	14,812
Totals for Province	**2,247,719**	**2,340,109**
British Columbia.		
Chilliwack	17,821	21,064
Cranbrook	20,726	21,570
Duncan	18,557	20,095
Fernie	14,468	15,488
Kamloops	34,914	39,012
Kelowna	24,841	27,468
Nanaimo	28,895	30,709
Nelson	44,083	47,413
New Westminster	93,962	96,487
Penticton	20,832	24,265
Port Alberni	10,705	11,539
Powell River	16,540	15,856
Prince George	12,243	13,933
Prince Rupert	36,747	33,835
Revelstoke	15,821	16,320
Rossland	10,029	10,544
Salmon Arm	9,510	10,760
Trail	35,193	38,630
Vancouver	1,406,935	1,431,830
Vernon	32,773	33,976
Victoria	289,429	315,357
Totals for Province	**2,739,845**	**2,852,022**
Yukon.		
Totals for Yukon	**12,265**	**13,083**
Summary.		
Prince Edward Island	161,026	179,860
Nova Scotia	1,401,929	1,486,815
New Brunswick	1,331,383	1,342,720
Quebec	7,431,940	7,544,313
Ontario	14,292,437	15,302,577
Manitoba	3,994,111	3,888,853
Saskatchewan	2,860,172	2,893,555
Alberta	2,247,719	2,340,109
British Columbia	2,739,845	2,852,022
Yukon	12,265	13,083
Totals for Canada	**36,472,827**	**37,843,907**

82.—Revenue and Expenditure of the Post Office Department for the quinquennial fiscal years ended 1890-1910, and fiscal years ended Mar. 31, 1911-32.

NOTE.—For all other years since Confederation, see 1911 Year Book, p. 288.

Fiscal Year.	Net Revenue.[1]	Expenditure.	Deficit.	Surplus.
	$	$	$	$
1890	2,357,389	3,074,470	717,081	–
1895	2,792,790	3,593,647	800,857	–
1900	3,183,984	3,645,646	461,662	–
1905	5,125,373	4,634,528	–	490,845
1910	7,958,547	7,215,337	–	743,210
1911	9,146,952	7,954,223	–	1,192,729
1912	10,482,255	9,172,035	–	1,310,220
1913	12,060,476	10,882,805	–	1,177,671
1914	12,956,216	12,822,058	–	134,158
1915	13,046,650	15,961,191	2,914,541	–
1916	18,858,410	16,009,139	–	2,849,271
1917	20,902,384	16,300,579	–	4,601,805
1918	21,345,394	18,046,558	–	3,298,836
1919	21,602,713	19,273,584	–	2,329,129
1920	24,449,917	20,774,385	–	3,675,532
1921	26,331,119	24,661,262	–	1,669,857
1922	26,554,538	28,121,425	1,566,887	–
1923	29,262,233	27,794,502	–	1,467,731
1924	29,100,492	28,305,937	–	794,555
1925	28,581,993	29,873,802	1,291,809	–
1926	31,024,464	30,499,686	–	524,778
1927	29,378,697	31,007,698	1,629,001	–
1928	30,529,155	32,379,196	1,850,041	–
1929	31,170,904	33,483,058	2,312,154	–
1930	32,969,293	35,036,629	2,067,336	–
1931	30,416,106	36,292,603	5,876,496	–
1932	32,476,604	34,448,986	1,972,382	–

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[1] "Net Revenue" is exclusive of salaries and allowances to postmasters and some other smaller items. The gross revenue in the fiscal year 1931 was $37,468,252 and in 1932, $39,276,248.

Auxiliary Services.—The auxiliary postal services—the issuing of money orders (including postal notes) and the facilities offered by the Post Office savings banks—have expanded enormously since Confederation. In 1868, there were 515 money order offices in operation, issuing orders to an amount of $3,342,574. In 1932 the number of offices had increased to 6,414, while the value of orders issued was nearly 40 times as large as in the earlier year. In the following tables, illustrating the use of money orders and postal notes, it will also be noticed that the large number of 14,324,715 money orders, representing a value of $132,625,260, was issued during 1932. The number of postal notes received and paid was 7,227,262, with a value of $12,629,304. It may be added that postal notes are issued payable to bearer and are in general use for the transfer of small sums, while money orders are payable to order at a designated post office. Statistical tables showing deposits with the Government savings banks since Confederation and combined business of Post Office and Dominion Government savings banks, 1927-32, are included in the chapter on Currency and Banking.

83.—Operations of the Money Order System in Canada, fiscal years ended Mar. 31, 1911-32.

Note.—For 1868 to 1910, see Canada Year Book, 1911, p. 289. For 1901-10, see 1932 Year Book, p. 622.

Fiscal Year.	Money Order Offices in Canada.	Orders Issued in Canada.	Value of Orders Issued in Canada.	Payable in—		Value of Orders Issued in other Countries, Payable in Canada.
				Canada.	Other Countries.	
	No.	No.	$	$	$	$
1911	3,501	4,840,896	70,614,862	45,451,425	25,163,437	8,664,557
1912	3,673	5,777,757	84,065,891	52,568,433	31,497,458	8,712,667
1913	3,923	8,688,563	101,153,272	61,324,030	39,829,242	9,081,627
1914	4,274	7,227,964	109,500,670	66,113,221	43,387,449	9,807,313
1915	4,499	6,990,813	89,957,906	64,723,941	25,233,965	9,707,383
1916	4,690	7,171,375	94,469,871	75,781,582	18,688,289	9,868,137
1917	4,810	8,698,502	119,695,535	97,263,961	22,431,574	9,704,610
1918	4.930	9,919,665	142,959,167	116,764,491	26,194,676	9,385,627
1919	4,953	9,100,707	142,375,809	116,646,096	25,729,713	10,351,021
1920	5,106	9,947,018	159,224,937	135,201,816	24,023,121	10,050,361
1921	5,197	11,013,167	173,523,322	155,916,232	17,607,090	6,680,971
1922	5,266	10,031,198	139,914,186	124,316,726	15,597,460	5,515,069
1923	5,337	11,098,222	143,055,120	126,617.350	16,437,770	8,986,041
1924	5,472	12,561,490	159,855,115	141,620,372	18,234,743	13,508,396
1925	5,578	13,435,448	163,519,320	145,769,761	17,749,559	13,957,613
1926	5,706	14,784,230	177,840,231	158,844,831	18,995,400	15,600,917
1927	5,797	15,760,994	188,219,777	167,206,859	21,012,918	15,532,673
1928	5,923	17,505,563	200,773,403	177,880,036	22,893,367	15,398,181
1929	6,066	17,210,316	203,129,237	179,833,100	23,296,138	14,096,027
1930	6,209	17,525,979	197,699,353	174,285,024	23,414,329	14,016,240
1931	6,401	16,313,134	167,749,651	149,012,359	18,737,292	12,906,487
1932	6,414	14,324,715	132,625,260	121,391,212	11,234,048	9,097,086

Attention may be drawn to the excess of the value of money orders issued in Canada for payment in other countries over the value of money orders issued outside for payment in Canada. This difference (about $2,137,000 in 1932 and about $33,580,000 in 1914) represents to a large extent remittances made by immigrants and to travellers in foreign countries. It is an indication, at least, of the large amounts sent out from Canada, and is an essential figure in the computation of our balance of international payments.

84.—Money Orders, by Provinces, and Total Postal Notes, fiscal years ended Mar. 31, 1928-32.

Province.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.
Money Order Offices in—					
Canada	**5,923**	**6,066**	**6,209**	**6,401**	**6,414**
Prince Edward Island	68	68	70	72	72
Nova Scotia	385	387	400	421	427
New Brunswick	284	281	285	306	307
Quebec	1,254	1,291	1,330	1,370	1,371
Ontario	1,653	1,676	1,681	1,696	1,687
Manitoba	402	414	435	450	452
Saskatchewan	805	833	853	891	897
Alberta	577	609	643	673	674
British Columbia	487	499	505	515	520
Yukon	8	8	7	7	7

84.—Money Orders, by Provinces, and Total Postal Notes, fiscal years ended Mar. 31, 1928-32—concluded.

Province.	1928.	1929.	1930.	1931.	1932.
Money Orders Issued in—	No.	No.	No.	No.	No.
Canada	**17,565,563**	**17,210,316**	**17,525,979**	**16,313,134**	**14,324,715**
Prince Edward Island	132,449	133,302	151,000	151,811	128,996
Nova Scotia	1,082,898	1,082,210	1,177,126	1,134,996	1,008,232
New Brunswick	625,937	658,700	726,631	689,993	566,527
Quebec	2,680,292	2,614,493	2,859,337	2,698,723	2,261,175
Ontario	4,814,717	4,674,538	4,813,685	4,587,967	4,006,994
Manitoba	1,251,054	1,240,124	1,240,430	1,139,333	1,013,233
Saskatchewan	3,476,742	3,280,063	3,057,750	2,653,994	2,331,567
Alberta	2,128,610	2,149,257	2,056,748	1,848,114	1,760,455
British Columbia	1,302,149	1,365,931	1,431,630	1,396,018	1,235,615
Yukon	10,715	11,698	11,642	12,185	11,921
Value of Money Orders Issued in—	$	$	$	$	$
Canada	**200,773,403**	**203,129,237**	**197,699,353**	**167,749,651**	**132,625,260**
Prince Edward Island	1,558,411	1,577,370	1,711,244	1,691,838	1,295,973
Nova Scotia	11,498,537	11,755,770	12,746,149	11,722,636	9,514,229
New Brunswick	7,272,069	7,508,412	8,236,195	7,408,955	5,515,290
Quebec	27,320,599	27,915,322	29,319,688	26,450,676	20,553,932
Ontario	53,329,608	53,392,573	53,684,637	47,294,433	37,497,963
Manitoba	14,024,147	14,362,604	13,771,051	11,531,293	9,006,233
Saskatchewan	41,740,502	41,087,022	35,195,400	26,142,693	19,888,827
Alberta	27,807,168	28,505,695	25,212,265	19,530,975	17,050,391
British Columbia	15,986,960	16,764,171	17,570,154	15,727,240	12,098,869
Yukon	235,401	260,298	252,565	248,907	203,553
Money Orders Paid in—	No.	No.	No.	No.	No.
Canada	**15,576,988**	**15,928,765**	**16,261,451**	**15,194,131**	**13,719,521**
Prince Edward Island	46,171	50,295	55,522	57,168	50,802
Nova Scotia	628,956	641,589	670,986	659,447	627,269
New Brunswick	1,091,069	1,045,897	1,148,453	1,075,018	929,408
Quebec	1,898,228	2,372,736	2,760,896	2,569,951	1,838,959
Ontario	5,177,944	4,929,503	4,886,156	4,644,032	4,537,142
Manitoba	3,469,756	3,462,363	3,337,598	2,980,705	2,746,432
Saskatchewan	1,890,988	1,957,848	1,833,069	1,715,563	1,625,339
Alberta	718,610	767,880	831,021	762,442	691,926
British Columbia	654,089	699,147	736,320	728,355	671,014
Yukon	1,177	1,447	1,430	1,450	1,230
Value of Money Orders Paid in—	$	$	$	$	$
Canada	**192,416,980**	**192,439,720**	**189,558,749**	**162,773,000**	**131,421,945**
Prince Edward Island	882,195	922,183	962,828	905,202	743,777
Nova Scotia	7,962,408	8,123,644	8,615,554	8,089,034	6,826,980
New Brunswick	12,157,500	11,896,720	12,492,358	11,057,962	8,432,979
Quebec	23,235,516	27,166,302	30,400,388	26,985,799	18,751,132
Ontario	60,099,268	55,864,338	54,669,931	48,548,791	41,822,499
Manitoba	40,905,097	39,171,978	35,474,587	27,537,919	22,247,614
Saskatchewan	23,908,547	24,484,599	21,527,686	17,473,777	14,267,265
Alberta	12,581,954	13,610,889	13,784,609	11,467,571	9,780,572
British Columbia	10,650,011	11,162,557	11,595,062	10,672,398	8,525,908
Yukon	34,485	36,509	35,741	34,546	23,219
Postal Notes—					
Total notes received and paid......No	7,490,169	7,912,970	8,466,055	8,145,855	7,227,262
Total value, including postage stamps affixed......$	16,673,633	16,670,112	15,578,489	14,681.376	12,629,304
Commission received......$	179,487	184,309	188,098	179,745	157,515

Postage Stamps.—The value of the postage stamps, post cards, etc., sold during each of the latest five fiscal years, as shown in the statement of revenue in the Postmaster General's reports, was as follows: $26,200,776 in 1928, $26,475,541 in 1929, $27,101,353 in 1930, $25,769,781 in 1931 and $27,242,715 in 1932. Receipts from postage paid in cash were as follows: $6,068,722 in 1927, $7,467,611 in 1928, $8,410,255 in 1929, $9,045,805 in 1930, $8,887,322 in 1931 and $9,078,136 in 1932.

Air Mail Services.—While certain curtailments have been made in the air-mail system in 1932 due to the need for economy, the total poundage of mail carried by air throughout Canada showed a reduction of only about 12·5 p.c. from the preceding year, while the mileage flown showed a decrease of approximately 30 p.c., indicating a substantial increase in the poundage per mile flown.

An interesting feature of the returns is the volume of mail carried by air into the several mining districts, and there would seem to be little doubt that aerial postal communication contributes materially to the development of Canada's natural resources.

85.—Mileage Flown and Weight of Mails Carried by Air, fiscal year ended Mar. 31, 1932.

Route.	Distance.	Single Trips Scheduled.	Trips Made.	Total Distance Flown.	Weight of Mail Carried.
	miles.	No.	No.	miles.	lb.
Amos-Chibougamau—discontinued Jan. 8, 1932	190	26	24	4,560	860
Amos-Siscoe	42	245	244	10,248	15,804
Leamington-Pelee Island	22	188	126	2,772	14,859
Moncton-Charlottetown via Summerside on eastbound trip	East 100 West 80	180	160	14,055	57,395
Moncton—Magdalen Islands	200	16	16	2,800	5,900
Montreal-Albany	200	314	281	55,882	16,959
Montreal-Detroit[1]	557·5	226	226	124,533	24,524
Toronto-Detroit	229·5	379	325	71,303	13,128
Montreal-Moncton—discontinued May, 1931	467	80	77	34,631	1,167
Narrow Lake-Sioux Lookout-Tuesdays Fridays	232 332	208	208	25,378	39,961
Peace River-North Vermilion	167	32	39	6,275	17,183
Quebec-Seven Islands	345	40	40	13,800	20,115
Regina-Edmonton[2]	493	254	244	116,904	8,281
Winnipeg-Calgary[2]	815·5	253	249	194,634	21,055
Winnipeg-Edmonton	991·5	391	372	340,332	40,468
Seven Islands-Anticosti	120	6	6	720	1,804
Toronto-Buffalo—discontinued May 30, 1931	100	49	45	4,580	6,967
Winnipeg-Pembina	66·4	732	704	46,745	25,378
Montreal-Rimouski	330	97	89	28,752	54,801
Special Flights	varied.	varied.	varied.	10,458	2,343
Mackenzie River Service—					
Fort McMurray-Fort Smith	1,676	160	150	119,659	54,549
Fort Smith-Fort Resolution		80	133		
Fort Resolution-Fort Simpson		40	63		
Fort Simpson-Aklavik		12	21		
Totals	–	–	–	**1,229,021**	**443,501**

[1] Superseded Aug. 16, 1931, by Toronto-Detroit.
[2] Superseded Aug. 15, 1931, by Winnipeg-Edmonton.

Subsidies, etc.—The conveyance of mail by land, water and air entailed a total expenditure of $14,953,113 during the fiscal year ended 1932. Land transportation (largely that by rural delivery) cost $6,532,084, railway carriage cost $7,161,434, conveyance by steamship cost $256,990, while that by air cost $1,002,605. These amounts were paid solely for services rendered as carriers. In addition, however, considerable mail is carried, on both the Atlantic and Pacific coasts, by steamships and steamship lines which are especially subsidized by the Government. Table **86**, showing amounts so paid in 1930, 1931 and 1932, follows.

86.—Mail Subsidies and Steamship Subventions, fiscal years ended Mar. 31, 1930-32.

NOTE.—The figures in the following table were supplied by F. E. Bawden, Esq., Director of Steamship Subsidies, Department of Trade and Commerce. They appear annually in the "Public Accounts", issued by the Finance Department and represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, including the conveyance of mails.

Service.	1930.	1931.	1932.
	$	$	$
Atlantic Ocean—			
Canada and Great Britain	–	–	802,000
Canada and South Africa	114,583	147,916	150,000
Canada and British East Africa	–	82,500	–
Eastern Canada and Brazil, Uruguay and the Argentine	110,000	120,000	100,000
To assist the carriage of livestock to Europe	–	–	43,739
Pacific Ocean—			
British Columbia, Australia and/or China	61,600	84,700	92,400
Canada, China and Japan	–	–	988,000
Canada and New Zealand, on the Pacific	100,000	100,000	100,000
Prince Rupert, B.C., and the Queen Charlotte islands	21,000	21,000	16,800
Vancouver and the British West Indies	33,000	47,100	45,900
Vancouver and ports on Howe sound	5,000	5,000	4,000
Vancouver and northern ports of British Columbia	24,800	24,800	19,840
Victoria, Vancouver, way ports and Skagway	25,893	25,000	25,000
Victoria and west coast Vancouver island	15,000	15,000	12,000
Local Services—			
Baddeck and Iona	10,500	10,500	10,500
Charlottetown and Pictou	35,000	40,000	40,000
Charlottetown, Victoria and Holliday's Wharf	5,000	7,000	5,600
Dalhousie, N.B., and Carleton, Que	3,000	3,000	2,400
Grand Manan and the mainland	20,000	34,250	33,000
Halifax and Bay St. Lawrence	4,800	3,600	2,880
Halifax, Canso and Guysborough	9,000	9,000	7,200
Halifax, LaHave and LaHave River ports	6,000	5,884	4,754
Halifax and Sherbrooke	1,500	1,485	793
Halifax, South Cape Breton and Bras d'Or Lake ports	5,000	5,000	4,000
Halifax, Spry Bay and Cape Breton ports	6,000	5,942	4,800
Halifax and west coast of Cape Breton	6,000	6,000	4,800
Ile aux Coudres and les Eboulements	–	1,418	2,000
Mainland, Miscou and Shippigan	2,000	2,000	1,600
Mulgrave, Arichat and Petit de Grat	14,285	14,776	12,000
Mulgrave and Canso	27,400	27,400	21,613
Mulgrave and Guysborough, calling at intermediate ports	13,955	14,000	10,987
Murray Bay and north shore (winter service)	32,900	32,900	35,290
Newcastle, Neguac and Escuminac, calling at intermediate ports on the Miramichi river and bay	4,500	4,500	3,600
Parrsboro, Kingsport and Wolfville	5,000	5,000	3,935
Pelee island and the mainland	11,000	10,906	8,800
Pictou, Mulgrave and Cheticamp	11,000	11,000	11,000
Pictou, New Glasgow and Antigonish Co. ports	1,000	1,000	800
Pictou, Souris and the Magdalen islands	50,000	50,000	50,000
Port Mulgrave, St. Peters, Irish cove, and Marble mountain	10,139	10,350	8,280
Quebec, Natashquan and Harrington, and other ports on the north shore of the gulf of St. Lawrence	85,000	85,000	85,000
Quebec or Montreal and Gaspé, and other ports on the south shore of the gulf of St. Lawrence	60,000	60,000	60,000
Rimouski, Matane and the north shore of the lower St. Lawrence	–	49,990	50,000
Rimouski and Pointe aux Outardes	12,500	–	–
Rivière du Loup and Tadoussac, and other north shore ports	14,625	14,647	12,000
St. Catherine's bay and Tadoussac	5,000	5,000	4,000
Saint John, and Bear River and other way ports	2,000	2,000	1,600
Saint John and Bridgetown	1,000	1,000	800
Saint John and Digby	15,000	15,000	12,000
Saint John, Digby, Annapolis and Granville	2,000	2,000	1,600
Saint John and Margaretville, and other ports on the bay of Fundy	4,500	4,500	3,471
Saint John and Minas Basin ports	5,000	5,000	5,000
Saint John and St. Andrews, calling at intermediate ports	4,000	4,000	3,200
Saint John, Westport and Yarmouth, and other way ports	18,000	18,000	14,400
Saint John and Weymouth	1,500	–	375
Summerville, Burlington and Windsor, N.S	500	488	400
Sydney and Bay St. Lawrence, calling at way ports	18,000	27,227	20,000
Sydney and Bras d'Or Lake ports, and ports on the west coast of Cape Breton	18,000	18,000	13,569
Sydney and Whycocomagh	16,000	16,000	16,000
Grant to the province of British Columbia for the improvement of the mail service on inland waters in that province	3,000	–	–
Inspection of subsidized steamship services	4,294	4,962	4,998
Totals	**1,083,436**	**1,322,745**	**2,998,724**

CHAPTER XIX.—LABOUR AND WAGES.[1]

PART 1.—LABOUR.

Section 1.—Occupations of the People.

The occupations of the people of a country are at any given time mainly determined by its natural resources and the stage which has been reached in their development. The outstanding characteristics of Canada are its enormous extent, its immense natural resources and the comparatively slight development of these, only the resources of the southern portions being as yet at all well-known. The developed areas fall into four economic units with quite distinct physical characteristics: first, the Maritime Provinces, where lands, forests, mines and fisheries are the chief natural resources ; secondly, Ontario and Quebec, with lands, forests, mines and abundant water power for manufacturing purposes; thirdly, the Prairie Provinces, where the land is the chief natural resource, except in Alberta which contains immense coal deposits; lastly, British Columbia, with fisheries, forests and mines, where agriculture plays a comparatively minor part. When the country as a whole is considered, the immense fertile areas of arable land must be considered as its chief natural resource, but in different parts of its vast expanse other resources predominate and give the key to the chief occupations of the people.

In Canada, as in other new countries, the labouring population (using the term in its widest sense) bears a larger proportion to the total than is the case in older civilizations where there exists more realized wealth. In addition to our native-born workers, great numbers of young males and smaller numbers of females, who have nothing to sell but their personal services, have, in the past, immigrated from older countries to Canada to find here a better market for their labour. Thus both the sex distribution and the age distribution of the population of Canada is rendered somewhat abnormal, an unusually large percentage of that population being of working age and of the male sex—that is, of the sex which is most generally gainfully employed.[2]

The Labour Force of Canada in 1931.—In 1931, out of a total population in the nine provinces of 8,159,095, 10 years of age and over (including 3,668 of unstated ages), 3,924,533 or 48·1 p.c. were gainfully employed, as compared with 3,173,169 or 47·5 p.c. in 1921, 2,723,634 or 49·4 p.c. in 1911, 43.9 p.c. in 1901 and 44·5 p.c. in 1891.

Male Labour in 1931.—Of the male population in the nine provinces 10 years of age and over in 1931 of 4,252,537, 3,258,614 or 76·6 p.c. were gainfully employed, as compared with 2,683,019 or 77·5 p.c. in 1921, 2,358,813 or 79·5 p.c. in 1911, 74·2 p.c. in 1901 and 76·6 p.c. in 1891. Thus the latest census shows a decrease in the proportion of males gainfully employed, a decrease probably due partly to a later age at school leaving, partly to a change in the age distribution of the male population 10 years of age and over, a larger percentage of the total being at relatively advanced ages, and a smaller percentage in the younger groups. For example, 5·5 p.c. of the males of Canada were over 65 years of age in 1931 as compared with 4·7 p.c. in 1921.

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[1] The sections and subsections of this chapter, with the exceptions of Sections 1, 3, 7 and Section 9, Subsection 3, all of Part I, have been revised by, or under the direction of, H. H. Ward, Deputy Minister, Department of Labour, Ottawa. The information in Section 3, Part I, has been obtained through the courtesy of the Provincial Departments of Labour or Bureaus of Labour, and that in Section 7, Part I, has been revised by the chairmen of the respective provincial Workmen's Compensation Boards.

[2] On the sex distribution of the population, see pp. 109-111; on the age distribution, see pp. 114-116.

Female Labour in 1931.—Of the female population of 10 years and over in the nine provinces, numbering altogether 3,906,522 in 1931, 665,919 or 17·0 p.c. were then gainfully employed, as compared with 490,150 or 15·2 p.c. in 1921, 364,821 or 14·3 p.c. in 1911, 12·0 p c. in 1901 and 11·1 p.c. in 1891. Thus the tendency for women to go increasingly into gainful occupations, which has been noticeable since 1891, continues.

1.—Persons Engaged in Gainful Occupations in Canada, by Sex and Occupation, 1931.

Occupation.	Canada.		
	Male.	Female.	Total.
Agriculture	1,103,542	24,225	1,127,767
Forestry, Fishing, Trapping	96,684	818	97,502
Mining, Quarrying, Oil and Salt Wells	71,584	427	72,011
Manufacturing—Total	520,829	110,372	631,201
Vegetable Products	61,138	16,618	77,756
Animal Products	43,317	11,129	54,446
Textile Products	48,781	48,950	97,731
Wood and Paper Products; Printing, etc	140,312	14,528	154,840
Iron and its Products	139,336	6,616	145,952
Non-Ferrous Metal Products	31,912	5,100	37,012
Non-Metallic Mineral Products	31,181	1,844	33,025
Chemical and Allied Products	12,864	2,926	15,790
Miscellaneous Products	11,988	2,661	14,649
Electric Light and Power	17,481	1,472	18,953
Construction (including Carpentry, Plumbing, etc.)	254,285	1,806	256,091
Transportation and Communications (not postal service)	282,788	23,421	306,209
Trade—Total	301,977	84,904	386,881
Retail	249,944	76,081	326,025
Wholesale	51,894	8,801	60,695
Wholesale-Retail Dealing	139	22	161
Finance	67,319	24,974	92,293
Service—Total	376,731	389,525	766,256
Professional	97,143	146,166	243,309
Public Administration, n.e.s.—			
Federal and Provincial	52,900	12,459	65,359
Municipal	47,961	2,905	50,866
Other	330	138	468
Recreational	13,788	2,421	16,209
Custom and Repair	62,448	18,594	81,042
Business Service	4,861	1,730	6,591
Personal Service	97,300	205,112	302,412
Other	165,394	3,975	169,369
Totals, All Occupations	**3,258,614**	**665,919**	**3,924,533**

Section 2.—The Dominion Department of Labour.

The Department of Labour of the Dominion Government was established in 1900 under the authority of the Conciliation Act, 1900 (63-64 Vict., c. 24). Its chief duties originally comprised the administration of certain provisions of this Statute designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wages policy for the protection of workmen employed on Dominion Government contracts and on works aided by grants of public funds, the collection and classification of statistical and other information relative to conditions of labour, and the publication of a monthly periodical known as the *Labour Gazette*. From 1900 to 1909 the Department was administered by the Postmaster General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909 (R.S.C., 1927, c. 111).

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act (R.S.C., 1927, c. 112). At present the Department is also charged with the administration of an Act passed in 1918 known as the Employment Offices Co-ordination Act (R.S.C., 1927, c. 57), the Government Annuities Act of 1908 (R.S.C., 1927, c. 7), the Technical Education Act enacted in 1919 (R.S.C., 1927, c. 193), the White Phosphorus Matches Act of 1914 (R.S.C., 1927, c. 128), the Combines Investigation Act of 1923 (R.S.C., 1927, c. 26), the Old Age Pensions Act of 1927 (R.S.C., 1927, c. 156), the Fair Wages and Eight Hour Day Act of 1930 (20-21 Geo. V, c. 20), the Vocational Education Act, 1931 (21-22 Geo. V., c. 59), the Unemployment and Farm Relief Act, 1931 (21-22 Geo. V, c. 58), the Unemployment and Farm Relief Continuance Act, 1932 (22-23 Geo. V, c. 13) and the Relief Act, 1932 (22-23 Geo. V, c. 36). The scope of the Department has increased in other directions, especially in investigating the cost of living, and in connection with the International Labour Organization of the League of Nations. For a report of the operation of the Old Age Pensions Act, see p. 780 and for the proceedings under the Combines Investigation Act, 1923, see p. 790. For the operation of the Government Annuities Act of 1908 and the Technical Education Act, see the chapters on Insurance and Education, respectively.

Industrial Disputes Investigation Act.—The Industrial Disputes Investigation Act (R.S.C., 1927, c. 112), has attracted considerable favourable attention from legislators and publicists throughout the world. As enacted in 1907, it forbids strikes and lockouts in industrial disputes affecting mines and public utilities until the matters in dispute have been dealt with by a board of conciliation and investigation consisting of three members, two appointed by the Minister of Labour on the recommendation of the respective parties to the dispute, the third on the recommendation of the first two, or, if they fail to agree, by the Minister himself. After their report has been made, either of the parties to the dispute may reject it and declare a strike or a lockout, a course adopted, however, only in a small percentage of cases. The machinery of the Act may be extended to other industries with the consent of the parties concerned. In January, 1925, a judgment was rendered by the Judicial Committee of the Privy Council declaring that the Act as it stood was not within the competence of the Dominion Parliament.[1] At the ensuing session of Parliament amendments were made to the Statute, with the object of limiting its operation to matters not within exclusive provincial jurisdiction. It was also provided by these amendments that the Statute should apply in the case of "any dispute which is within the exclusive legislative jurisdiction of any Province and which by the legislation of the Province is made subject to the provisions of this Act".

The Legislatures of all provinces except Prince Edward Island have taken advantage of this provision and enacted enabling legislation, by which the Dominion Industrial Disputes Investigation Act becomes operative in respect of disputes of the classes named in the Dominion law and otherwise within exclusive provincial jurisdiction.

A review of the proceedings under the Industrial Disputes Investigation Act from its enactment in March, 1907, to Mar. 31, 1932, shows that during the 25 years 772 applications were received for the establishment of boards of conciliation and investigation, as a result of which 515 boards were established. In all but 38 cases, strikes or lockouts were averted or ended.

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[1] See p. 241 of the *Labour Gazette* for February, 1925, for text of judgment of the Judicial Committee of the Privy Council in regard to the validity of this Statute.

Fair Wages Branch.—The Fair Wages Branch of the Department of Labour is charged with the preparation of fair wages conditions and schedules of minimum wage rates, which are inserted in Dominion Government contracts and must be adhered to by contractors in the execution of such works. The number of fair wages schedules prepared, from the adoption of the Fair Wages Resolutions in 1900 up to the end of the fiscal year 1931-32, was 5,870. The number of fair wages schedules and clauses furnished during the fiscal year 1931-32 was 272.

The fair wages policy of the Government of Canada was originally based on a resolution adopted by the House of Commons in 1900 and expressed in an Order in Council adopted on June 7, 1922, and amended on April 9, 1924. As drawn up by Order in Council it was applied to contracts for building and construction operations, also to contracts for the manufacture of certain classes of Government supplies. The policy required that the current wage rates and working hours of the district should be observed in the case of all workmen employed, or if there were no current rates or hours in existence, then fair and reasonable conditions in both respects. Contracts for railway construction to which the Dominion Government has granted financial aid, either by way of subsidy or guarantee, are likewise subject to fair wages conditions. The policy has, moreover, been extended within recent years to cover contracts for works carried out by the several Harbour Commissions and aided by grant of public funds.

An Order in Council passed on Dec. 3, 1929, provided for the payment of current wage rates to workmen employed in the construction, alteration, extension, maintenance and operation of works for the utilization of water powers under licence from the Dominion Government. The Fair Wages Clause was also inserted in an agreement made by the Dominion Government with a paper company for the cutting of pulpwood in Manitoba, under which the company agreed to pay to those employed in the industry wage rates not less than those generally accepted as current in each trade or occupation in similar industries, and to maintain conditions of labour not less favourable than those prevailing in similar industries in the district.

On May 30, 1930, an Act of Parliament was adopted, known as the Fair Wages and Eight Hour Day Act, 1930, which provides for the payment of current wage rates to all persons employed on contracts made with the Government of Canada for works of construction, remodelling, repair or demolition, provided that the wages in all cases shall be fair and reasonable. This Statute also directed that the working hours of persons while so employed shall not exceed eight hours a day. It was further declared that the foregoing conditions are to be applied to all workmen employed by the Government itself on the construction, remodelling, repair or demolition of any work.

On Mar. 27, 1930, an Order in Council was passed providing that, except in cases where the work of employees was intermittent in character, or the application of the rule was not deemed to be practicable, or in the public interest, the hours of work of any Dominion Government employees who had up to that time been required to work more than eight hours daily should be reduced to eight hours a day, with a half holiday on Saturday.

The Department of Labour is frequently consulted by other Departments of the Government regarding the wage rates to be observed in connection with work undertaken on the day labour plan.

Labour Gazette.—A monthly publication, known as the *Labour Gazette*, has been issued by the Dominion Department of Labour since its establishment in 1900. It contains a monthly review of the industrial situation in Canada and of the state of employment, including reports of the operations of the Employment Service of Canada in the various provinces, also information relative to: labour legislation, wage rates and hours of labour, wholesale and retail prices of staple commodities in Canada and other countries, labour disputes (including the proceedings under the Industrial Disputes Investigation Act), industrial accidents, legal decisions affecting labour, industrial training and technical education, proceedings under the Combines Investigation Act, and other matters of general or current industrial interest. The *Labour Gazette* is widely distributed throughout Canada, and the statistical and other information contained therein is constantly used in connection with wages and other issues between employers and workers. A subscription charge of 20c. per annum is made for this publication.

Labour Legislation.—Much attention is devoted to labour legislation. Information as to new laws enacted by the Dominion and the provinces is kept up to date, while notes or articles regarding their provisions are published in the *Labour Gazette*. Since 1917, the Department has published annual reports containing the text of Canadian labour laws enacted during each year, together with an introduction summarizing this legislation under subject headings. The first of these reports was based on Dominion and provincial labour legislation as existing at the end of 1915. Reports on the labour laws enacted in the four succeeding years were published in regular order. In 1920 a further consolidation was brought out and annual reports supplementary thereto were issued in 1921, 1922, 1923, 1924, 1925 and 1926. A third consolidated report on labour legislation, containing the texts of the Dominion and provincial labour laws up to the end of 1928, was issued in 1929. Annual supplements containing labour laws of subsequent years were issued in 1930, 1931 and 1932, respectively. The Department of Labour has also published articles dealing with various provincial labour laws, indicating the extent to which these have been standardized and the differences which exist.

Joint Industrial Councils.—One section of the report of the Royal Commission of 1919 on Industrial Relations dealt with shop committees and industrial councils, the commissioners urging the adoption in Canada of the principles underlying Whitley Councils and kindred systems. The subject was also discussed at the National Industrial Conference of 1919. The committee to which the matter was referred made a unanimous report, urging the necessity for greater co-operation between employer and employee and stating their belief that this end could be furthered by the establishment of joint industrial councils.

Under Order in Council P.C. 2232 of Dec. 22, 1928, there was established an Advisory Committee on the Civil Service Superannuation Act to advise the Treasury Board in respect to matters incidental to the administration of the Act. This Committee is composed of five representatives named by organizations of civil servants and five named by the Government, of whom three are named by the Department of Finance, one by the Department of Insurance and one by the Department of Justice. The Committee began its sessions in January, 1929, and is still functioning in connection with matters affecting the superannuation of public employees.

Section 3.—Provincial Labour Departments and Bureaus.

The rapid industrial development at the end of the nineteenth century in Quebec and Ontario, the leading manufacturing provinces, brought with it the recognition of the need of special provincial offices to safeguard the interests of labour, with the result that the Ontario Bureau of Labour was established in 1900 and the Quebec Department of Public Works and Labour in 1905. In 1904 an Act was passed in New Brunswick providing for a Bureau of Labour, but this never became operative. Some years later, to cope with conditions created by the growth of industry in the West, Acts were passed providing for the creation of Provincial Bureaus of Labour in Manitoba (1915), in British Columbia (1917), in Saskatchewan (1920), and in Alberta (1922). A Department of Labour was established in Nova Scotia by c. 3 of the Statutes of 1932.

The Nova Scotia Department of Labour.—The Act establishing the Nova Scotia Department of Labour provides that "the Department of Labour shall take cognizance of all matters relating to labour and shall administer such affairs, matters, Acts and regulations as the Governor in Council from time to time assigns to that Department, whether or not the same have been assigned or have belonged by or under any Act of the Legislature of Nova Scotia or otherwise to some other Department or to some member of the Executive Council".

The Department is in charge of a Minister of Labour, who has under him a Secretary of Labour. The latter is empowered to collect and publish information and statistics affecting labour, and to administer such Acts as may be assigned to the Department by Order in Council. At present, labour bureaus in the province and the administration of the Factories Act have been assigned by Order in Council to the Department of Labour.

The Quebec Department of Labour.—This Department was formerly known as the Department of Public Works and Labour, each division having a separate Deputy Minister, but at the session of 1931 the Legislature created each division a distinct department.

Its duties include the institution and control of inquiries into important industrial questions and those relating to manufactures, and it may collect useful facts and statistics relating thereto, to be transmitted to the Quebec Bureau of Statistics. The Department is charged with the administration of provincial Acts respecting trade disputes, factory inspection, maintenance of fair wage clauses in Provincial Government contracts, superintendence of licensed registry offices for domestic workers, inspection of boilers and foundries, prevention of fires, establishment and maintenance of provincial employment offices, the issue of educational certificates to wage-earners under 16 years of age, together with the inspection of heating installations, steam, hot-water and hot-air furnaces. The Department's functions also include the qualification of electricians and contractors in that line of business, the qualification of stationary engineers and firemen, and the inspection of boilers registered under the Interprovincial Code, together with the registering of the blue prints in connection with the construction of boilers. The Department publishes annual reports outlining the work performed.

The Department of Labour of Ontario.—The Department of Labour of Ontario was established in 1919 and placed under the direction of a Minister and a Deputy Minister of Labour. This Department had its origin in the Bureau of Industries formed in 1882 under the Department of Agriculture, to collect and publish statistics relating to the industries of the province and (later) to administer the first Factory Act of 1886. In 1900 a Bureau of Labour, attached to the Department of Public Works, was authorized to collect and publish information relating to employment, wages and hours, strikes, labour organizations and general conditions of labour. Several investigations were made regarding such matters and the first free employment offices were opened by the Bureau of Labour. In 1916 this Bureau was in turn superseded by the Trades and Labour Branch, also under the Ministry of Public Works but administered by a Superintendent. The establishment of the Branch had been recommended by the Ontario Commission on Unemployment and the expansion of the work undertaken by the Branch, and the increase in the demands made upon its resources led to the creation of a special Department of the Government by the Department of Labour Act, 1919.

The Department of Labour administers the following Acts: The Department of Labour Act; The Factory, Shop and Office Building Act; The Steam Boiler Act; The Operating Engineers Act; The Building Trades Protection Act; The Employment Agencies Act; The Apprenticeship Act; The Regulations respecting the Protection of Persons working in Compressed Air; The Regulations respecting the Protection of Persons working in Tunnels and Open Caissons; The Minimum Wage Act. The Department is required to maintain employment offices, to collect information respecting employment, sanitary and other conditions in work places, wages and hours of work, and to study labour legislation in other parts of the British Empire and in foreign countries, as well as any suggested changes in the labour laws of Ontario. The representatives of the Department of Labour have right of access to offices, factories and other work places at any reasonable hour, and may be authorized to hold inquiries under the Public Inquiries Act. The Department publishes annual reports which cover the work of the officers employed in the administration of the various Acts assigned to it. The Minimum Wage Act is administered by the Minimum Wage Board.

Manitoba Bureau of Labour.—The Act of 1915, establishing the Manitoba Bureau of Labour, provided that it be attached to the Department of Public Works; an amendment of 1922, however, provided for its attachment to any other Department, as the Lieutenant-Governor in Council may determine.

The Bureau is established to co-operate with employers, trade unions and others. It is charged with the enforcement of the following Acts: The Manitoba Factories Act; The Bake Shops Act; The Building Trades Protection Act; The Fair Wage Act; The Electricians' Licence Act; The Elevator and Hoist Act; The Shops Regulation Act; The Public Buildings Act; The Minimum Wage Act; The Steam Boiler Act; the licensing of cinematograph projectionists under The Public Amusements Act; The Fires Prevention Act; The One Day Rest in Seven Act.

Saskatchewan Department of Railways, Labour and Industries.—This was created as a separate Department by an Act of 1928. It is administered by the Minister of Railways, Labour and Industries, assisted by a permanent Deputy Minister. The functions of the Department include the administration of the following Acts: The Factories Act and Elevator Regulations; The Steam Boilers Act; The Building Trades Protection Act; The Act protecting the payment of wages to certain employees; The Mines Safety and Welfare Act; The Minimum Wage Act; and the Order in Council respecting fair wages in government contracts, also of all matters connected with railways over which the Government of Saskatchewan by any Act may have control. It is also charged with the operation of public free employment offices; the collection and publication of statistics relating to employment; wages and hours of labour throughout the province; strikes and other difficulties; trade unions and labour organizations; the relations between capital and labour, and other subjects connected with industrial problems; the commercial, industrial and sanitary conditions of employment; raw products of Saskatchewan and their industrial possibilities; other matters related to industrial development.

Alberta Bureau of Labour.—The Act of 1922, creating the Alberta Bureau of Labour, provided that the Bureau be in charge of a Minister having under him a Commissioner of Labour. The latter is empowered to collect and publish information and statistics affecting labour, and to administer such Acts as may be assigned to the Bureau by Order in Council. Important among these Acts are: The Alberta Government Employment Bureau Act; The Minimum Wage Act; The Boilers Act; The Factories Act; The Theatres Act; The Trade Schools Act. The Bureau issues annual reports.

The British Columbia Department of Labour.—This Department was instituted by an Act of 1917, under a Minister and Deputy Minister of Labour. It administers the laws of British Columbia affecting labour, and is empowered to collect information respecting industries, wages, employment, prices, labour organizations and other data pertaining to labour problems. Prominent among the Acts under the jurisdiction of the Department are: The Minimum Wage Act for Female Employees; The Male Minimum Wage Act (passed in 1929); The Hours of Work Act; The Semi-Monthly Payment of Wages Act; The Factories Act. The Department also operates the employment bureaus within the province. The Deputy Minister of Labour is *ex officio* Chairman of the Board of Adjustment under the Hours of Work Act of 1923, which, with exceptions, provides for the eight-hour working day in industry; he is also Chairman of the Male Minimum Wage Board and Chairman of the Minimum Wage Board for Women. Annual reports are published by the Department, containing much information respecting labour matters.

Section 4.—Canada and the International Labour Organization.[1]

The International Labour Organization of the League of Nations was set up in 1919 in accordance with Part XIII of the Treaties of Peace, to promote the improvement of industrial conditions by legislative action and international agreement.

The Organization comprises the Permanent International Labour Office in Geneva, Switzerland, and the International Labour Conference, which meets annually and is composed of four representatives of each Member State, two of whom are government delegates, while two represent the employers and the employed respectively. Fifty-eight countries are members of the International Labour Organization, including all of the important industrial countries of the world except the United States.

The International Labour Office functions as a secretariat of the annual conference, and also collects and publishes information on subjects relating to industrial life and labour. The Office is under the control of a Governing Body consisting of

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[1] On this subject see also the 1921 Year Book, pp. 607-609; 1922-23 Year Book, pp. 704-707; 1924 Year Book, pp. 666-670; 1925 Year Book, pp. 676–678; 1926 Year Book, pp. 679-681; 1927-28 Year Book, pp. 735–737; 1929 Year Book, pp. 725–727; 1930 Year Book, pp. 710–712; 1931 Year Book, pp. 753–755 and 1932 Year Book, pp. 633–634.

24 persons, appointed by the International Labour Conference, of whom 12 represent Governments, 6 represent employers and 6 represent workers. In addition to its control of the Labour Office, the Governing Body is charged with the preparation of the agenda of the annual conference.

Under the terms of the Peace Treaties, eight of the government seats on the Governing Body are held by the countries of "chief industrial importance". Canada was designated by the Council of the League of Nations as one of these eight States of "chief industrial importance". The Minister of Labour is the Government representative on this body. Mr. Tom Moore, President of the Trades and Labour Congress of Canada, is one of the six workers' representatives on the Governing Body.

The conclusions of the International Labour Conference are cast in the form of draft conventions or recommendations, addressed to the national Governments which comprise the membership of the International Labour Organization. A two-thirds majority of the Conference is required for the adoption of either a draft convention or recommendation. Under the Treaties of Peace, the Member States are bound to bring the draft conventions or recommendations before the authority or authorities within whose competence the subject matter lies, for the enactment of legislation or other action. Thus the findings of the Conference only become binding in the various countries concerned if and when action regarding them is taken by the latter.

Most of the proposals dealt with in the successive meetings of the Labour Conference since its establishment in 1919 have been adjudged by the law officers of the Crown to fall within provincial jurisdiction. The draft conventions and recommendations of the Conference have in all cases been brought to the attention of the Dominion Parliament, while those which dealt with subjects within provincial control were also referred to the Provincial Governments.

The Dominion Department of Labour is entrusted with the duties arising out of the relations of Canada with the International Labour Organization. These have entailed much correspondence, not only with the International Labour Organization but also with the different Departments of the Dominion Government, with the provinces, and with employers' and workers' organizations. Replies have also been prepared in the Department of Labour to various questionnaires issued by the International Labour Office. Performance of these duties has necessitated a close study of the different technical questions which have figured on the agenda of the various conferences and at the meetings of the Governing Body. A bulletin entitled "Canada and the International Labour Conference" has been issued by the Department of Labour, furnishing information respecting the International Labour Organization. Comprehensive articles dealing with the proceedings of the annual sessions of the International Conference have been published from year to year in the *Labour Gazette.* These articles contain the text of the various draft conventions and recommendations of the Conference.

Sixteen sessions of the International Labour Conference have been held. Thirty-three draft conventions and 41 recommendations have been adopted at these annual gatherings. The draft conventions and recommendations of the Conference have, among other subjects, related to the following: hours of labour, measures for the avoidance of unemployment, employment conditions of women and children, employment conditions of seamen, employment in agriculture, weekly rest, statistics of immigration and emigration, principles of factory inspection, inspection of emigrants on board ship, workmen's compensation for accidents and occupational diseases, sickness insurance, minimum wages, prevention of accidents to dockers, forced labour, and regulation of hours of work of salaried employees and of workers in coal mines.

Up to Dec. 31, 1932, 489 ratifications of these conventions had been registered with the League of Nations, of which 8 were conditional or with delayed application; 51 had been approved by the competent national authority and 115 had been recommended to the competent national authority for approval.

Canadian Action on Draft Conventions and Recommendations.—The action taken by the Dominion and the Provincial Governments on the draft conventions and recommendations of the International Labour Conference has been summarized in the articles on this subject published in previous Year Books and referred to in the footnote on p. 750.

Section 5.—Organized Labour in Canada.

The Dominion Department of Labour publishes an annual report on labour organization; this sets out the various branches of unionism in existence, the principles on which they are founded, their chief activities, and statistics of the different groups comprised in the trade unions of the Dominion. Reference is also made in this annual report to the principal international labour organizations with which the organized workers of Canada are affiliated.

Trade unionism in Canada occupies a unique position, by reason of the fact that most organized workers in the Dominion are members of organizations whose headquarters are located in a foreign country, *viz.*, the United States. In years gone by Canadian workmen who sought a livelihood in the United States greatly outnumbered those who came from that country to Canada. As industry was further developed in the United States there arose a number of unions of various crafts, and with these the Canadian workers soon became affiliated. With the development of industry in the Dominion, many of these Canadians returned to their native land, bringing with them the gospel of trade unionism and collective bargaining as a means of protecting their rights. In many instances these trade unionists become the nuclei of strong bodies of organized workers formed in Canadian cities.

The usual résumé of the origin and growth of the trades union movement in Canada has been omitted in this edition, owing to considerations of space. The interested reader is referred to pp. 712-714 of the 1930 edition of the Year Book and to "Labour Organization in Canada, 1931", published by the Dominion Department of Labour. This latter publication presents the history and present organization of trades unionism in the Dominion in a very comprehensive manner. The following paragraphs give a short sketch of the present organization of the five main groups into which Canadian labour organizations now fall.

Trades and Labour Congress of Canada.—Through the initiative of the Toronto Trades Assembly (now the Toronto District Trades and Labour Council), the first national labour organization, the Canadian Labour Union, was formed in Toronto in September, 1873. This organization held its second and third annual meetings in 1874 and 1875, but disappeared as a result of the serious depression of the later '70's. In 1883 the Trades and Labour Council of Toronto, feeling the necessity of the wage-earners of Canada having a medium through which to express their opinions, assumed the responsibility of calling another trades and labour congress, which met in Toronto on Dec. 26, with 47 delegates. On the summons of the Toronto Council, a second meeting, with 109 delegates, assembled on Sept. 14, 1886, the first occasion on which any labour body outside of the province of Ontario was represented. A permanent organization was effected at this meeting under the name of "Trades and Labour Congress of the Dominion of Canada". This was the title of the organization until 1895, when the title "Trades and Labour Congress of Canada" was adopted in preference to "Canadian Federation of Labour". Since 1886 conventions have been held annually, the 1932 meeting in Hamilton being counted as the 48th. The Trades and Labour Congress is representative of international trade unionism in the Dominion, the bulk of its membership being drawn from the international organizations which have local branches in Canada. According to reports for 1931, the Congress received payment of per capita tax on the Canadian membership of 60 international bodies and also from two national organizations which had their entire membership in the Dominion; the combined membership was 141,137, comprised in 1,635 local branches.

All-Canadian Congress of Labour.—The All-Canadian Congress of Labour was organized Mar. 16, 1927, by labour bodies not eligible for membership in the old established Trades and Labour Congress of Canada. One of the promoters of the new body was the Canadian Federation of Labour, which was formed as a result of the expulsion from the Trades and Labour Congress of Canada of Knights of Labour assemblies and all other unions which were composed of members of crafts over which existing international organizations claimed jurisdiction. With the formation of the All-Canadian Congress of Labour the Canadian Federation passed out of existence. At the close of 1931, the All-Canadian Congress of Labour had eleven central bodies in affiliation, with a combined membership of 25,221, as well as 31 directly chartered local unions with a membership of 3,101, making a total combined reported membership of 28,322.

Membership of International Organizations in Canada.—At the close of 1931 there were 82 international craft organizations having one or more local branch unions in Canada, two less than the number recorded in 1930. These bodies among them had 1,884 local branches in the Dominion with 188,219 members. The membership of the two industrial unions with branches in the Dominion was 27,726 comprised in 51 branches. Thus the total international trade union membership in Canada at the close of 1931 was 215,945. The international craft organizations represent approximately 61 p.c. of the total of all classes of workers in the Dominion organized under trade union auspices (Table **3**).

Canadian Central Labour Bodies.—There are in Canada 25 Canadian central labour bodies, 18 of which are in direct opposition to the international organizations. In some instances these Canadian central labour bodies have been formed by secessionists from international unions. The combined membership of the Canadian central labour organizations on Dec. 31, 1931, was 48,509, comprised in 606 local branches (Table **4**).

Membership of Independent Units.—There are 37 independent local labour bodies in the Dominion, 36 of which had a membership of 12,099 at the end of 1931.

Federation of Catholic Workers of Canada.—During the period when the Knights of Labour operated in Quebec, there existed also four independent unions, one of labourers and three of leather and shoe workers. Up to 1902 these several bodies were represented at the annual conventions of the Trades and Labour Congress of Canada. In that year, in an effort to eliminate a duplication of unions and bring the independent bodies under the banner of the international organizations, the Trades Congress denied them further representation. The Knights of Labour assemblies gradually disappeared, but the independent unions continued to exist. Up to the time of the expulsion by the Trades Congress of those bodies which were outside the ranks of the international organizations, there was only one Catholic union, that composed of shoe workers in the city of Quebec, which had accepted the social doctrine of the Roman Catholic Church and admitted a chaplain (a member of the clergy), this course being adopted in 1901 following the adjustment of a dispute in the shoe industry in that city by the archbishop of the diocese. Some years later, a number of other national unions were formed in the province of Quebec, all of which accepted for their guidance the declarations of Pope Leo XIII, who on May 15, 1891, issued an encyclical on "The Condition of the Working Classes", the provisions of which were subsequently proclaimed by Pope Pius X as fundamental rules for workingmen's associations. In 1918, a conference of national unions was held in Quebec city, followed by other meetings in Three Rivers in 1919 and Chicoutimi in 1920; the delegates at the latter conference, numbering 225 from 120 unions, decided to establish a permanent central body to co-ordinate the work of the scattered units. Accordingly, at the 1921 conference held in Hull, at which approximately 200 delegates representing 89 unions were present, a constitution to govern the new body was approved. The name selected was "Federation of Catholic Workers of Canada" and permanent officers were elected, the constitution and by-laws becoming effective on Jan. 1, 1922. From information at hand, there are 121 National Catholic unions with a combined membership of 25,151.

One Big Union.—Delegates from Western Canada to the Quebec convention of 1918, dissatisfied with the alleged reactionary policy of the Trades and Labour Congress of Canada, held a caucus at which it was decided to concentrate their energies towards having the Trades Congress legislate in accordance with their views. Some months later a meeting of delegates was called by the British Columbia Federation of Labour to assemble immediately following the annual convention of that body, which, for the first time in its history, met outside of the province under its jurisdiction, in Calgary. The conference assembled on Mar. 13, 1919, with 239 delegates present; the outcome of the meeting was the formation of an industrial organization, the "One Big Union". On June 11, 1919, a conference of the new body was held in Calgary to further the plans of the organization, which had a membership of 41,150 at the close of 1919. From the outset the O.B.U. met with much opposition from the old-established labour unions, represented by the Trades and Labour Congress of Canada, which was opposed to the substitution of industrial unionism for the existing system of craft unions. According to information supplied by the general secretary, the O.B.U., at the close of 1931, had 46 units under charter, one of which was located in the United States, as well as two central labour councils (bodies similar to trades and labour councils), the combined reported membership being 24,260.

Total Reported Membership of Organized Labour in Canada.—The numerical strength of organized labour in Canada at the close of 1931 was given by the Department of Labour as follows: international organizations, 1,935 local branches with an aggregate membership of 215,945; Canadian central labour bodies, 606 branches and 48,509 members; independent units, 37 with 12,099 members; National Catholic unions, 121 with 25,151 members; grand total, 2,772 local branches and 310,544 members. As compared with 1930, this represents a decrease of 37 branches and of 11,905 members. Table **2** shows by years the membership of trade unions in Canada since 1911.

2.—Membership of Trade Unions in Canada, 1911-31.

Year.	Members.	Year.	Members.	Year.	Members.
1911	133,132	1918	248,887	1925	271,064
1912	160,120	1919	378,047	1926	274,064
1913	175,799	1920	373,842	1927	290,282
1914	166,163	1921	313,320	1928	300,602
1915	143,343	1922	276,621	1929	319,476
1916	160,407	1923	278,092	1930	322,449
1917	204,630	1924	260,643	1931	310,544

International Trade Unions Operating in Canada.—Table **3** gives the names of the 82 international craft labour organizations and the two industrial unions which now carry on operations in Canada, and shows: (1) the number of branches which were in existence in the Dominion at the close of 1931, and (2) the reported membership. The reported figures in Tables **3** and **4** are given in italics where the information has been obtained from sources other than the headquarters of the indicated organization.

3.—International Trade Unions Operating in Canada.

NUMBER OF BRANCHES AND NUMBER OF MEMBERS IN CANADA, DECEMBER, 1931.

International Organization.	No. of Branches in Canada.	Reported Members in Canada.
American Federation of Labour	8	349
Asbestos Workers, International Association of Heat and Frost Insulators and	*4*	*193*
Bakery and Confectionery Workers' International Union of America	7	191
Barbers' International Union of America, Journeymen	34	1,305
Bill Posters and Billers of America, International Alliance of	*3*	*300*
Blacksmiths, Drop Forgers and Helpers, International Brotherhood of	*21*	*909*
Boilermakers, Iron Shipbuilders and Helpers, International Brotherhood of	35	2,547
Bookbinders, International Brotherhood of	11	626
Boot and Shoe Workers' Union	10	1,053
Brewery, Flour, Cereal and Soft Drink Workers, International Union of the United	15	900
Bricklayers', Masons' and Plasterers' International Union of America	57	4,387
Bridge, Structural and Ornamental Iron Workers, International Association of	12	367
Broom and Whisk Makers' Union, International	–	3
Carpenters and Joiners of America, United Brotherhood of	74	11,553
Carvers' Association of America, International Wood	1	22
Cigarmakers' International Union of America	5	183
Cloth Hat, Cap and Millinery Workers' International Union	3	215
Clothing Workers of America, Amalgamated	15	5,000
Commercial Telegraphers' Union of America	6	1,682
Conductors, Order of Sleeping Car	1	20
Electrical Workers, International Brotherhood of	43	3,111
Elevator Constructors, International Union of	7	*354*

3.—International Trade Unions Operating in Canada—concluded.

International Organization.	No. of Branches in Canada.	Reported Members in Canada.
Engineers, International Union of Operating	31	1,307
Firemen and Oilers, International Brotherhood of	36	800
Fire Fighters, International Association of	20	2,490
Fur Workers' Union, International	*6*	*1,057*
Garment Workers of America, United	6	1,250
Garment Workers' Union, International Ladies'	10	3,000
Glass Bottle Blowers' Association of the United States and Canada	6	122
Glass Workers' Union, American Flint	3	101
Glove Workers' Union, International	—	7
Granite Cutters' International Association of America	4	100
Hod Carriers', Building and Common Labourers' Union of America, International	10	470
Hotel and Restaurant Employees' and Beverage Dispensers' International Alliance	11	846
Iron, Steel and Tin Workers of North America, Amalgamated Association of	1	30
Jewellery Workers' Union, International	*2*	*72*
Lathers, International Union of Wood, Wire and Metal	9	250
Leather Workers' International Union, United	1	250
Lithographers of America, Amalgamated	7	443
Locomotive Engineers, Brotherhood of	101	5,671
Locomotive Firemen and Enginemen, Brotherhood of	103	6,020
Longshoremen's Association, International	10	1,400
Machinists, International Association of	77	8,648
Maintenance-of-Way Employees, Brotherhood of	198	17,440
Marble, Stone and Slate Polishers, Rubbers, and Sawyers, Tile and Marble Setters' Helpers and Terrazzo Workers' Helpers, International Association of	3	118
Metal Polishers' International Union	2	267
Metal Workers' International Association, Sheet	17	947
Mine Workers of America, United	41	17,100
Moulders' Union of North America, International	31	3,000
Musicians, American Federation of	37	5,411
Painters, Decorators and Paperhangers of America, Brotherhood of	36	1,514
Papermakers, International Brotherhood of	30	1,678
Pattern Makers' League of North America	14	275
Paving Cutters' Union of the United States and Canada	4	100
Photo-Engravers' Union of North America, International	6	436
Plasterers' and Cement Finishers' International Association, Operative	18	1,380
Plumbers, Gas and Steam Fitters, United Association of Journeymen	36	2,400
Printers', Die Stampers' and Engravers' Union, International Plate	1	40
Printing Pressmen's and Assistants' Union, International	19	4,500
Pulp, Sulphite and Paper Mill Workers of the United States and Canada, International Brotherhood of	15	1,555
Quarry Workers' International Union of North America	2	40
Railroad Signalmen of America, Brotherhood of	9	300
Railroad Telegraphers, Order of	12	8,138
Railroad Trainmen, Brotherhood of	94	13,278
Railway Carmen of America, Brotherhood of	116	13,316
Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, Brotherhood of	69	4,300
Railway Conductors, Order of	68	2,883
Railway, Bus and Coach Employees of America, Amalgamated Association of Street and Electric	26	8,549
Retail Clerks' International Protective Association	2	*150*
Roofers, Damp and Waterproof Workers	1	14
Seamen's Union of America, International	1	*250*
Siderographers, International Association of	*1*	*10*
Stage Employees, International Alliance of Theatrical	38	1,188
Stereotypers' and Elecrotypers' Union, International	10	340
Stonecutters' Association of North America, Journeymen	17	560
Switchmen's Union of North America	7	73
Tailors' Union of America, Journeymen	8	150
Teamsters, Chauffeurs, Stablemen and Helpers, International Brotherhood of	13	950
Textile Workers of America, United (Including American Federation of Full Fashioned Hosiery Workers)	2	1,000
Train Despatchers' Association, American	—	12
Typographical Union, International	50	4,780
Upholsterers' International Union of America	4	173
Totals	1,884	188,219
One Big Union	46	24,260
Industrial Workers of the World	5	3,466
Grand Totals	**1,935**	**215,945**

Table **4** gives the number of branches and the members of Canadian central labour bodies operating in Canada at the close of 1931.

4.—Canadian Central Labour Bodies Operating in Canada.
NUMBER OF BRANCHES AND NUMBER OF MEMBERS, 1931.

Organization.	No. of Branches or Affiliations.	Members Reported.
Trades and Labour Congress of Canada	42	5,739
All-Canadian Congress of Labour	31	3,101
Amalgamated Building Workers of Canada	7	1,076
Amalgamated Carpenters of Canada	15	2,500
Amalgamated Civil Servants of Canada	38	4,644
Brotherhood of Canadian Pacific Express Employees	26	1,527
Canadian Association of Railway Enginemen	52	1,555
Canadian Association of Stationary Engineers	15	500
Canadian Brotherhood of Railway Employees	225	17,350
Canadian Carpet Weavers' Beneficial Association	5	162
Canadian Electrical Trades' Union	9	963
Canadian Ironworkers', Piledrivers' and Riggers' Union	1	180
Canadian Printers' Union	–	36
Civil Service Association of Alberta	*12*	*700*
Dominion Railway Mail Clerks' Federation	15	926
Electrical Communication Workers of Canada	6	195
Federated Association of Letter Carriers	43	1,456
Federated Seafarers' Union of Canada	1	500
Industrial Union of Needle Trades' Workers of Canada	–	2,500
Lumber Workers' Industrial Union of Canada	30	3,500
Mine Workers' Union of Canada	*16*	*3,131*
National Association of Marine Engineers	16	1,086
National Union of Painters, Decorators and Paperhangers of Canada	*4*	*186*
Provincial Federation of Ontario Fire Fighters	26	726
Saskatchewan Brotherhood of Steam and Operating Engineers	2	30
United Postal Employees of Canada	41	2,400
Vancouver and District Waterfront Workers' Association	1	680
Totals	**679**	**57,349**

Section 6.—Fatal Industrial Accidents.

Statistics of fatal industrial accidents have been compiled by the Dominion Department of Labour since 1903, the data being obtained from provincial Workmen's Compensation Boards, the Board of Railway Commissioners for Canada and various other governmental authorities, from departmental correspondents and from press clippings. Table **5** shows the number of fatal industrial accidents reported to the Department during each year from 1928 to 1932 inclusive. The number of fatalities in each of the different industries is also shown as a percentage of the total number. Preliminary figures show 961 fatal industrial accidents in 1932.

5.—Fatal Industrial Accidents in Canada, by Industries, 1928-32.

Industry.	Number of Fatal Accidents.					Per cent of Total Accidents.				
	1928.	1929.	1930.	1931.	1932.[1]	1928.	1929.	1930.	1931.	1932.[1]
Agriculture	194	156	122	163	154	11·6	8·8	7·5	13·7	16·0
Logging	176	235	175	76	72	10·5	13·3	10·4	6·4	7·5
Fishing and trapping	43	54	36	40	30	2·5	3·1	2·2	3·4	3·1
Mining, non-ferrous smelting and quarrying	260	234	258	158	123	15·5	13·2	16·0	13·3	12·8
Manufacturing	201	250	196	142	114	12·0	14·2	11·8	11·9	11·9
Construction	250	298	324	217	122	14·9	16·9	19·4	18·2	12·7
Electric light and power[2]	–	–	42	44	21	–	–	2·5	3·7	2·2
Transportation and public utilities	387	366	327	205	191	23·1	20·7	19·7	17·3	19·9
Trade	64	58	58	43	50	3·8	3·3	3·4	3·6	5·2
Service	102	114	117	97	81	6·1	6·4	7·1	8·2	8·4
Miscellaneous	–	1	–	3	3	–	0·1	–	0·3	0·3
Totals	**1,677**	**1,766**	**1,655**	**1,188**	**961**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

[1] Figures subject to revision. [2] Previously reported under Transportation and Public Utilities.

Causes of Fatal Accidents.—The classification of fatal accidents in 1932 by causes shows that the largest number, 260, came under the category "by moving trains, vehicles, etc". This includes all accidents due to cars or engines, including mine and quarry cars, and to automobiles and other power vehicles and horse-drawn vehicles, as well as accidents caused by moving implements, by moving watercraft and by aircraft. Next in order as a cause came "falls of persons", 160 in number, including those who fell from some elevation and those who fell into pits, shafts, holds of vessels, harbours, rivers, etc. "Dangerous substances" including electric current, explosives, hot and inflammable substances, gas fumes, boiler explosions, etc., caused 155 fatalities. Fatalities numbering 142 were caused by falling objects. Animals caused 44 fatalities, including 27 caused by horses. Thirty-one fatalities were caused by working machines, 25 by prime movers, 27 by striking against or being struck by objects, 16 by handling of heavy or sharp objects, 13 by hoisting apparatus, 4 by tools, 12 by infection, 24 due to industrial diseases, 11 by shooting and violence, 10 by cave-ins and 16 by lightning, frost, storms and sunstroke.

Numbers of industrial accidents, fatal and non-fatal, dealt with by the various provincial Workmen's Compensation Boards are included in the following section on Workmen's Compensation in Canada.

Section 7.—Workmen's Compensation in Canada.

An account of the development of workmen's compensation legislation in Canada from employers' liability legislation was given at pp. 744-746 of the 1927-28 Year Book, while a summary of the 1932 legislation with regard to workmen's compensation appears in the general sketch of labour legislation in Canada at pp. 787-789 of the current edition. Details regarding the operation of the various Workmen's Compensation Boards of the provinces are given below.

Operations of the Workmen's Compensation Boards.—*Nova Scotia.*—The Workmen's Compensation Act was passed in 1915 but only became effective on Jan. 1, 1917. During the fifteen years between that date and Dec. 31, 1931, 109,005 accidents were reported to the Board, of which 94,977 were compensated as per Table 6. Prior to Jan. 1, 1920, medical aid was only furnished in special cases.

6.—Compensation Paid and Accidents Compensated by the Nova Scotia Workmen's Compensation Board, 1917-31.

(Estimates for outstanding claims not included.)

Year.	Compensation.	Medical aid.	Total.	Accidents Compensated.
	$	$	$	$
1917	503,258	202	503,460	4,836
1918	826,740	–	826,740	4,931
1919	629,156	491	629,647	4,949
1920	1,135.235	36,561	1,171,796	7,116
1921	705,752	36,296	742,048	4,903
1922	576,906	40,147	617,053	5,022
1923	808,560	56,484	865,044	6,248
1924	874,478	63,974	938,452	5,786
1925	638,787	68,740	707,527	5,340
1926	875,940	84.122	960,062	6,652
1927	1,052,303	88,978	1,141,281	6,871
1928	1,076,074	95,069	1,171,143	7,666
1929	936,210	117,632	1,053,842	9,479
1930	879,828	129,399	1,009,227	8,821
1931	951,256	106,578	1,057,834	6,357

New Brunswick.—The Workmen's Compensation Act of New Brunswick was passed in 1918. It extends to a wide range of industries, and is administered by a Board of three persons, levying assessments and paying benefits. For the sums paid out annually from 1920 as compensation and for medical aid see Table **7.**

7.—Compensation Paid by the New Brunswick Workmen's Compensation Board, 1920-31.

Year.	Weekly Compensation.	Permanent Partial Disability.	Fatal.		Medical Aid.		Permanent Total Disability Reserve.
			Funeral Expenses.	Reserve for Pensions.	Doctors' Fees and Transportation.	Hospital and Nursing Service.	
	$	$	$	$	$	$	$
1920	195,063	73,440	1,799	128.158	39,324	15,606	-
1921	159,096	103,054	3,661	188,945	56,631	22,378	-
1922	162,988	84,316	2,906	124.088	76,046	31,568	-
1923	204,353	90,349	3,573	130,339	83,530	35,935	-
1924	203,946	113,555	3,425	162,740	87,261	41,528	-
1925	186,946	90,044	2,784	144,285	84,897	38,920	-
1926	185,624	76,780	2,033	93,838	73,149	40,293	-
1927	211,692	103,430	2,427	88,299	79,481	43,994	-
1928	217.890	116,208	3,141	127,490	80,212	51,984	-
1929	243,770	99,266	3,388	137,667	85,238	59.217	-
1930	199,313	92,344	2,682	116,055	77,722	54,172	6,237
1931	181,676	73,774	1,581	72,481	79,021	60,183	-

Quebec.—The Quebec Workmen's Compensation Commission was established in 1928 by authority of c. 80 of the Statutes of that year. The Act was brought into force by proclamation on June 9, 1928, operations of the Commission commencing as of Sept. 1, 1928. Under this Act, the Quebec Commission did not insure employers against their liability. On April 4, 1931, a new Act was enacted by the Quebec Legislature (21 Geo. V, c. 100), effective Sept. 1, 1931, providing for state insurance, practically along the same lines as the Workmen's Compensation Act of Ontario. Table **8** shows the operations of the Quebec Commission from Sept. 1, 1928 to Dec. 31, 1932.

8.—Compensation Paid and Accidents Compensated by the Quebec Workmen's Compensation Commission, 1928-32.

Year.	Claims.	Accidents Compensated.	Accident Cost.
	No.	No.	$
1928 (4 months)	8,266	2,625	209,764
1929	25,610	21,377	3,229,554
1930	20,900	19,850	3,792,346
1931 (8 months)	12,420	13,204	2,758,785
1931 (4 months) New Act	14,803	12,717	1,275,323
1932 New Act	32,345	29,587	3,104,563

Ontario.—Under the system operated by the Ontario Workmen's Compensation Board in Schedule 1, where the liability is collective, 24 classes of industries pay various percentages of their pay rolls annually to the Board and escape individual civil liability for accidents and certain specified industrial diseases. The percentage of pay roll collected by the Board is graded according to the degree of hazard in the occupation and ranged in 1931 from 15 cents per $100 of pay roll in blue-printing to $10 per $100 in wrecking of buildings, erection of high metal chimneys, etc., and aerial testing. The average for all classes was $1.18 per $100 of pay rolls which amounted to $389,740,000. Certain other industries under schedule 2, including municipal undertakings, railways, car shops, telegraphs, telephones, etc., are made individually liable to pay the rates of compensation fixed under the Act. Employees of the Dominion or of the province, killed or injured in the discharge of their duty, are by special legislation placed on the same footing as those of private employers of the second class.

Statistics of the benefits awarded and the accidents to workers reported during the first 18 years of the operation of the Act appear in Table 9; 43,904 accidents were *paid for* during the year 1932 including: 283 cases of death, 33 of permanent total disability, 2,417 of permanent partial disability, 22,998 of temporary disability and 18,173 in which medical aid only was provided. These latter are all under Schedule 1, as medical aid in Schedule 2 cases and Crown cases is furnished directly by the employer.

9.—Benefits Awarded and Accidents Reported by the Ontario Workmen's Compensation Board, 1915-32.

Year.	Benefits Awarded.				Accidents Reported.			
	Schedule 1.		Schedule 2 and Crown Compensation.	Total Benefits.	Schedule 1.	Schedule 2.	Crown.	Total.
	Compensation.	Medical Aid.						
	$	$	$	$	No.	No.	No.	No.
1915	692,389	[1]	200,932	893,321	13,878	3,144	11	17,033
1916	1,553,653	[1]	451,710	2,005,363	21,269	4,806	17	26,092
1917	2,286,955	83,514[2]	623,556	2,994,025	30,701	5,813	18	36,532
1918	2,751,137	369,346	763,511	3,883,995	40,662	7,113	73	47,848
1919	2,808,639	386,299	997,923	4,192,869	36,236	7,918	106	44,260
1920	5,113,150	703,706	1,963,390	7,780,245	46,177	7,222	1,452	54,851
1921	3,858,017	662,794	1,668,452	6,189,264	36,272	7,666	1,253	45,191
1922	3,417,102	692,820	1,582,975	5,692,897	42,139	7,124	1,148	50,411
1923	4,036,170	788,906	1,348,786	6,173,862	51,655	6,080	3,374	61,109
1924	4,052,288	835,956	1,234,576	6,122,820	49,558	4,916	4,201	58,675
1925	3,635,530	875,836	1,054,077	5,565,443	50,883	5,079	4,050	60,012
1926	3,664,040	988,487	1,168,825	5,821,352	57,032	4,942	3,942	65,916
1927	3,930,418	1,062,860	1,091,378	6,084,655	62,063	5,412	4,504	71,979
1928	4,565,689	1,166,508	1,335,751	7,067,948	69,011	5,815	4,572	79,398
1929	5,346,621	1,385,525	1,280,012	8,012,158	76,029	6,008	5,066	87,103
1930	4,942,756	1,336,046	1,144,216	7,423,018	61,490	4,486	3,291	69,267
1931	3,917,045	1,060,763	1,043,584	6,021,392	46,069	3,348	3,477	52,894
1932	3,202,639	817,240	1,105,741	5,125,621	35,264	2,474	3,732	41,470

[1] No provision for medical aid.
[2] Half year only.

Manitoba.—Under the Workmen's Compensation Act, effective Mar. 1, 1917, Part 1 of the Act, dealing with workmen in hazardous occupations, is administered by The Workmen's Compensation Board, which charges insurance rates according to the hazard of the industry, the sums received by the workman being in lieu of the rights of action previously existing. The province, the city of Winnipeg, and certain corporations operating public utilities are permitted by the law to practise self-insurance.

From the date of the coming into force of the Act to Dec. 31, 1931, the Board dealt with 81,593 compensable accidents and paid out $10,447,463 for compensation and medical aid. Of the accidents in 1931, 3,132 involved medical aid costs only, 3,310 involved temporary and 196 permanent disability, while 33 resulted in death (Table **10**).

10.—Compensation Paid and Accidents Compensated by the Manitoba Workmen's Compensation Board, 1917-31.

Year.	Compensation.	Medical Aid.	Total.	Accidents Compensated.
	$	$	$	No.
1917	289,870	23,002	312,872	1,323
1918	304,135	35,121	339,256	1,731
1919	285,772	40,748	326,520	1,805
1920	389,710	78,566	468,276	2,509
1921	527,102	114,118	641,210	2,688
1922	585,292	156,734	742,026	4,977
1923	624,581	161,805	786,386	4,933
1924	476,722	155,166	631,888	4,972
1925	538,781	178,814	717,595	5,404
1926	599,144	190,023	789,167	7,046
1927	605,957	208,815	814,772	7,066
1928	812,328	250,823	1,063,151	8,873
1929	893,991	259,830	1,153,821	10,449
1930	892,636	223,795	1,116,431	8,310
1931	608,596	159,291	767,887	6,671

Saskatchewan.—The Workmen's Compensation (Accident Fund) Act became fully effective July 1, 1930, and covers practically all employees in the province except railway employees engaged in the running trades, casual workers, farm and ranch labourers, domestic and menial servants, janitors, retail store employees, and persons who cannot be classed as workmen.

The Act is administered by a board of three and imposes compulsory collective liability on the employers covered. The schedule of benefits is similar to that provided by other Compensation Acts. Table **11** shows the number of accidents and benefits paid to the end of 1932.

11.—Compensation Paid and Accidents Compensated by the Saskatchewan Workmen's Compensation Board, 1930-32.

Year.	Compensation.	Medical Aid.	Total.	Accidents Compensated.
	$	$	$	No.
1930[1]	131,338	28,434	159,772	2,639
1931	308,662	100,748	409,410	3,969
1932	255,933	73,398	329,331	2,844

[1] Six months.

Alberta.—The Workmen's Compensation Act of 1918 became effective Aug. 1, 1918, as regards mining, and Jan. 1, 1919, in respect of almost all industries except agriculture, railroading and the operation of retail stores and offices. Railroading (except for the running trades) was brought within the scope of the Act in 1919, and a further amendment in 1928 left only conductors and trainmen exempt from the operations of the Act.

Table **12** shows the operations of the Board for the calendar years 1921 to 1932. Of the 10,049 accidents reported in 1931, 33 were fatal and 123 resulted in some permanent injury. Similar details for the 1932 figures are not available. The amounts shown below do not include sums transferred to the pension fund, which had assets amounting to $2,575,025 on Dec. 31, 1931, nor do they include administration expenses nor sums set aside to cover estimated liabilities.

12.—Compensation Paid and Accidents Compensated by the Alberta Workmen's Compensation Board, 1921-32.

Year.	Compensation.	Medical Aid.	Total.	Accidents Reported.	Accidents Compensated.
	$	$	$	No.	No.
1921	253,669	113,433	367,102	7,069	3,566
1922	265,326	134,252	399,578	7,518	3,314
1923	323,369	161,732	485,101	9.160	4,268
1924	241,090	127,397	368,487	7,383	3,627
1925	312,990	154,870	467,860	8,355	4,099
1926	298,404	124,138	422,542	8,930	4,629
1927	371,787	161,537	533,324	10,149	5,547
1928	456,526	207,602	664,128	13,400	6,636
1929	507,438	265,636	773,074	14,899	7,138
1930	498,015	264,780	762,795	12,607	6,091
1931	452,643	216,212	668,855	10,049	4,878
1932	407,284	203,745	611,029	8,974	4,607

British Columbia.—The Workmen's Compensation Act, effective Jan. 1, 1917, provides compulsory accident insurance in almost every industrial occupation carried on in the province, protecting in 1931 approximately 150,000 employees with a pay roll of almost $150,000,000. Insurance rates levied against employees are graded according to the hazard of the industry. All employers under the Act are required in addition to deduct one cent per day or part thereof from the wages of employees and to remit this money to the Board to the credit of the medical aid fund, which provides all necessary medical and surgical and hospital expenses for injured employees. For figures see Table **13**.

13.—Compensation Paid and Accidents Compensated by the British Columbia Workmen's Compensation Board, 1917-31.

Year.	Compensation.	Medical Aid.	Total.	Claims (gross).
	$	$	$	No.
1917	603,274	62,668	665,942	13,685
1918	1,224,039	268,985	1,493,024	22,498
1919	1,394,696	289,108	1,683,804	18,185
1920	1,709,759	397,451	2,107,210	20,905
1921	1,771,126	431,748	2,202,874	16,883
1922	1,767,260	457,196	2,224,466	19,647
1923	2,157,918	514,762	2,672,680	24,184
1924	2,309,007	602,733	2,911,740	25,566
1925	2,419,372	618,942	3,038,314	27,563
1926	2,481,456	678,231	3,159,687	30,365
1927	2,654,200	643,594	3,297,794	30,066
1928	2,898,021	688,446	3,586,467	32,793
1929	3,588,626	752,623	4,341,249	36,750
1930	3,403,743	773,397	4,177,140	33,285
1931	2,572,254	568,289	3,140,543	25,877

Section 8.—Strikes and Lockouts.

Statistics of strikes and lockouts in Canada have been collected by the Dominion Department of Labour since its establishment in 1900. Table **14** shows the number of disputes, the number of employees involved in disputes, and the time loss in working days for each year from 1901 to 1932 and the totals for the period The items in the columns headed "time loss in working days" in the tables following are calculated by multiplying the number of persons directly involved in strikes and lockouts by the number of working days they are so affected during the time the disputes are in existence. Tables **15** and **16** give detailed analyses, by provinces and by industries, for 1931 and 1932.

Summary tables of the figures with details as to strikes and lockouts during 1932 may be found in the *Labour Gazette* for February, 1933, pp. 132-151.

Industrial Disputes in Recent Years.—In each of the years since 1925, until 1932, the time loss in "man working days" from strikes and lockouts was less than in any year since 1916 and less than in most of the years back to 1901, when the record was begun. This was chiefly because there were no coal mining disputes involving large numbers of workers for relatively long periods of time. In 1932 there was a considerable number of disputes in coal mining, some involving large numbers of employees for relatively long periods. The number of strikes and lockouts in existence in 1932 was 116, as compared with 88 in 1931, but the number of employees involved was 23,390 in 1932; this was greater than in any year since 1926. Table **14** includes figures as to coal mining and industries other than coal mining.

14.—Strikes and Lockouts in Canada, by years, 1901-32.

Year.	Coal Mining.			Industries other than Coal Mining.			All Industries.			
	Number of Disputes in Existence during year.	Number of Workers Involved.	Time Loss in Working Days.	Number of Disputes in Existence during year.	Number of Workers Involved.	Time Loss in Working Days.	Number of Disputes. In Existence during the year.	Number of Disputes. Beginning in the year.	Number of Workers Involved.	Time Loss in Working Days.
1901	2	1,760	7,040	97	22,329	730,768	99	97	24,089	737,808
1902	3	510	10,120	122	12,199	193,181	125	124	12,709	203,301
1903	7	5,410	173,441	168	32,998	685,518	175	171	38,408	858,959
1904	4	184	792	99	11,236	192,098	103	103	11,420	192,890
1905	10	5,564	101,770	86	6,949	144,368	96	95	12,513	246,138
1906	13	4,549	146,622	137	18,833	231,654	150	149	23,382	378,276
1907	13	8,990	102,824	175	25,070	417,318	188	183	34,060	520,142
1908	7	3,541	13.600	69	22,530	689.971	76	72	26,071	703,571
1909	13	8,618	720,180	77	9,496	160,483	90	88	18,114	880,663
1910	3	2,950	485,000	98	19,253	246,324	101	94	22,203	731,324
1911	6	9,890	1,513.320	94	19,395	307.764	100	99	29,285	1,821,084
1912	2	2,243	107,240	179	40,617	1,028.546	181	179	42,860	1.135,786
1913	4	4,837	562.025	148	35,682	474,229	152	143	40,519	1,036,254
1914	3	2,500	280,800	60	7,217	210,050	63	58	9,717	490,850
1915	9	2,753	11,907	54	8,642	83,135	63	62	11,395	95,042
1916	8	11,270	72,387	112	15,268	164,427	120	118	26,538	236,814
1917	21	17,379	534,890	139	32,876	538.625	160	158	50,255	1,123,515
1918	46	22,920	130,696	184	56,823	517,246	230	228	79,743	647.942
1919	20	10,130	383,659	316	138,785	3,017,283	336	332	148,915	3.400,942
1920	35	12,128	99,920	287	48,199	699,604	322	310	60,327	799,524

14.—Strikes and Lockouts in Canada, by years, 1921-32—concluded.

Year.	Coal Mining.			Industries other than Coal Mining.			All Industries.			
	Number of Disputes in Existence during year.	Number of Workers Involved.	Time Loss in Working Days.	Number of Disputes in Existence during year.	Number of Workers Involved.	Time Loss in Working Days.	Number of Disputes.		Number of Workers Involved.	Time Loss in Working Days.
							In Existence during the year.	Beginning in the year.		
1921	10	1,456	31,318	158	26,801	1,017,596	168	159	28,257	1,048,914
1922	21	26,475	798,518	83	17,300	730,113	104	89	43,775	1,528,661
1923	23	20,814	299,539	63	13,447	372,211	86	77	34,261	671,750
1924	15	21,201	1,089,484	55	13,109	205,570	70	64	34,310	1,295,054
1925	17	18,672	1,040,276	70	10,277	153,005	87	86	28,949	1,193,281
1926	16	8,445	35,193	61	15,389	231,408	77	75	23,834	266,601
1927	20	16,653	53,833	54	5,646	98,737	74	72	22,299	152,570
1928	14	5,033	88,000	84	12,548	136,212	98	96	17,581	224,212
1929	8	3,015	6,805	82	9,901	145,275	90	88	12,940	152,080
1930	15	6,228	24,183	52	7,540	67,614	67	67	13,768	91,797
1931	9	2,129	11,523	79	8,609	192,715	88	86	10,738	204,238
1932	33	8,540	132,766	83	14,850	122,234	116	111	23,390	255,000
Totals	**432**[1]	**276,817**[1]	**9,119,701**	**3,625**[1]	**739,814**[1]	**14,205,282**	**4,055**[1]	**3,933**	**1,016,631**[1]	**23,324,983**

[1] Figures for disputes extending over the end of a year are here counted more than once.

Table **15** is a record of industrial disputes, by provinces, for the years 1931 and 1932. In 1931, the chief time loss was in British Columbia where strikes of some magnitude occurred involving sawmill workers employed by firms operating on the Pacific coast and where masters, mates and marine engineers were involved in a prolonged dispute. A large time loss, however, was recorded in Ontario also, due chiefly to strikes of clothing factory workers in Toronto. In 1932 the chief time loss was in Alberta, due to strikes of coal miners; in British Columbia, chiefly in sawmills; and in Ontario owing to a number of strikes of loggers in the northern part and of fur workers in Toronto.

15.—Strikes and Lockouts, by Provinces, Number of Workers Involved and Time Loss, 1931 and 1932.

Province.	1931.[1]				1932.[1]			
	No. of Disputes.	No. of Workers Involved.	Time Loss.		No. of Disputes.	No. of Workers Involved.	Time Loss.	
			Working Days.	P.C. of Total.			Working Days.	P.C. of Total.
Prince Edward Island	–	–	–	–	–	–	–	–
Nova Scotia	5	1,198	4,682	2·3	11	4,814	17,930	7·0
New Brunswick	2	44	192	0·1	–	–	–	–
Quebec	13	1,118	8,090	3·9	25	6,964	47,503	18·6
Ontario	23	2,866	66,132	32·4	31	3,467	33,815	13·3
Manitoba	8	408	6,785	3·3	3	77	1,483	0·6
Saskatchewan	5	744	6,746	3·3	8	365	4,191	1·7
Alberta	10	662	5,717	2·8	20	3,294	111,783	43·8
British Columbia	21	3,576	85,894	42·1	18	4,409	38,295	15·0
Interprovincial	1	122	20,000	9·8	–	–	–	–
Totals	**88**	**10,738**	**204,238**	**100·0**	**116**	**23,390**	**255,000**	**100·0**

[1] Including strikes of unemployed men on relief work, receiving wages, not maintenance—in 1931: Nova Scotia, 1 dispute involving 12 workers, 12 days' time loss; Alberta, 1 dispute, 30 workers, 30 days' time loss; British Columbia, 5 disputes, 795 workers, 4,520 days' time loss; in 1932: Quebec, 2 disputes involving 950 workers, 3,125 days' time loss.

Table **16** shows strikes and lockouts by industries during 1931 and 1932, the most important during 1931 occurring in clothing, manufacturing, sawmilling, printing and publishing, water transportation, mining and fishing; in 1932 most of the important disputes occurred in coal mining, fishing, manufacturing (clothing and furs), and in logging and sawmilling.

16.—Strikes and Lockouts, by Industries, 1931 and 1932.

Industry.	1931.						1932.					
	Disputes.		Workers Involved.		Time Loss.		Disputes.		Workers Involved.		Time Loss.	
	Number.	Per cent of Total.	Number.	Per cent of Total.	Man Working Days.	Per cent of Total.	Number.	Per cent of Total.	Number.	Per cent of Total.	Man Working Days.	Per cent of Total.
Logging	3	3·4	236	2·2	2,250	1·0	11	9·5	1,435	6·1	9,890	3·9
Fishing and trapping	3	3·4	1,000	9·4	11,400	5·6	2	1·7	3,200	13·7	29,500	11·6
Mining, etc[1]	9	10·2	2,129	19·8	11,523	5·7	33	28·5	8,540	36·5	132,766	52·1
Manufacturing	43	48·8	5,406	50·3	149,214	73·0	54	46·5	8,811	37·7	75,175	29·5
Rubber products	1	1·1	71	0·6	71	0·1	1	0·9	273	1·2	4,500	1·8
Boots and shoes (leather)	–	–	–	–	–	–	1	0·9	80	0·3	500	0·2
Fur, leather and other animal products	3	3·4	220	2·1	5,100	2·4	5	4·3	924	3·9	13,460	5·3
Textiles, clothing, etc	23	26·1	3,105	29·0	68,538	33·5	29	25·0	6,740	28·8	48,995	19·2
Printing and publishing	3	3·4	169	1·3	21,191	10·4	2	1·7	48	0·2	3,095	1·2
Other wood products	8	9·1	1,641	15·5	51,657	25·3	12	10·3	668	2·9	4,089	1·6
Metal products	3	3·4	127	1·2	1,115	0·6	2	1·7	18	0·1	36	0·0
Non-metallic minerals, chemicals, etc	2	2·3	73	0·6	1,542	0·7	2	1·7	60	0·3	500	0·2
Construction	13	14·8	549	5·1	3,346	1·7	10	8·6	1,307	5·6	7,257	2·8
Buildings and structures	6	6·8	292	2·7	2,159	1·0	8	6·9	357	1·5	4,132	1·6
Bridge[2]	1	1·2	30	0·3	340	0·2	–	–	–	–	–	–
Highway	3	3·4	94	0·8	712	0·4	–	–	–	–	–	–
Other	3	3·4	135	1·3	135	0·1	–	–	–	–	–	–
Transportation and Public Utilities	3	3·4	451	4·2	20,900	10·2	–	–	–	–	–	–
Water transportation	2	2·3	281	2·6	18,900	9·3	–	–	–	–	–	–
Electricity and gas[3]	1	1·1	170	1·6	2,000	0·9	–	–	–	–	–	–
Service	14	16·0	967	9·0	5,605	2·8	6	5·2	97	0·4	412	0·1
Public administration[4]	7	8·0	837	7·8	4,562	2·2	–	–	–	–	–	–
Recreational	5	5·7	110	1·0	683	0·4	4	3·5	35	0·1	315	0·1
Business and personal	2	2·3	20	0·2	360	0·2	2	1·7	62	0·3	97	0·0
Totals	88	**100·0**	**10,738**	**100·0**	**204,238**	**100·0**	116	**100·0**	**23,390**	**100·0**	**255,000**	**100·0**

[1] Includes non-ferrous metal smelting.
[2] Covers the erection of all large bridges.
[3] Does not include undertakings mainly public utilities.
[4] Includes water services.

Causes and Results of Industrial Disputes.—During 1931 and 1932, as in previous years, most of the disputes were in regard to wages, or wages and working conditions, but a large proportion of disputes (and these included some of the most important) were in regard to trade unionism, usually concerned with union wages and working conditions, including recognition of unions, closed shop, etc. As in previous years many of the disputes during 1931 and 1932 were settled by negotiation; in 1932, out of a total of 113 disputes terminated during the year 53 settlements resulted from negotiation. An appreciable number of disputes terminated in the return of strikers or by their replacement, 44 being thus terminated in 1932.

Section 9.—Employment and Unemployment.

Subsection 1.—Operations of the Employment Service of Canada.

Employment Service of Canada.—Under sec. 3 of The Employment Offices Co-ordination Act (c. 57, R.S.C., 1927), an Act passed by the Dominion Parliament in May, 1918, the Minister of Labour is empowered:—

"(a) to aid and encourage the organization and co-ordination of employment offices and to promote uniformity of methods among them;

"(b) to establish one or more clearing houses for the interchange of information between employment offices concerning the transfer of labour and other matters;

"(c) to compile and distribute information received from employment offices and from other sources regarding prevailing conditions of employment".

The Act further provides that certain sums of money are to be appropriated annually and paid to the provinces on a basis proportionate to the amount that each expends on the maintenance of employment offices.

The desired uniformity and co-ordination of employment office activities throughout the various provinces are obtained by having the Dominion's payments contingent upon an agreement ensuring that the provinces, in the conduct of their employment offices, shall endeavour to fill situations in all trades and occupations for both men and women, and that no charge shall be made to employers or employees for this service. Each province agrees to maintain a provincial clearance system in co-operation with the interprovincial clearance system established by the Dominion Government, in order to secure the necessary mobility of labour as between localities in the same province or in different provinces. For the fiscal year 1932-33, agreements were concluded with all of the provinces except Prince Edward Island. Thus is formed the Employment Service of Canada—a chain of employment offices reaching from Halifax to Vancouver. At the time the Act came into force only 12 provincial employment offices were operated in Canada. This number was steadily increased until, at the close of 1919, due to the impetus given by the Employment Offices Co-ordination Act together with the requirements of the demobilization period, offices were functioning at 84 different centres. Subsequent contractions have reduced the Service to offices permanently located at 66 centres (on Dec. 31, 1932), distributed by provinces as follows: Nova Scotia, 3; New Brunswick, 3; Quebec, 7; Ontario, 27, Manitoba, 4; Saskatchewan, 9; Alberta, 5; and British Columbia, 8.

Employment Service Council of Canada.—An Order in Council, issued in 1918 in pursuance of the Act, provided for the formation of a body to be advisory to the Minister of Labour in the administration thereof. This body, known as the Employment Service Council of Canada, is composed of representatives of the Dominion Departments of Labour and Pensions and National Health, the Provincial Governments, the Canadian Manufacturers' Association, the Canadian Construction Association, the Trades and Labour Congress of Canada, the Railway Association of Canada, the Railway Brotherhoods, the Canadian Lumbermen's Association, the Canadian Council of Agriculture and the returned soldiers. At the eleven meetings of the Council, the most recent of which was held on Aug. 21-22, 1930, various recommendations and suggestions relative to employment office administration were brought forward and presented to the Minister.

Operations of Employment Offices.—Statistics covering the work of the local offices are collected and tabulated by the Employment Service Branch of the Department of Labour. Table **17** shows the positions available, applications for work and placements effected by the Service in each year since 1920 for the Dominion, and for the years 1931 and 1932 by provinces. During 1932 there were 652,428 applications for employment, 366,028 vacancies and 352,214 placements recorded, as compared with 826,153 applications, 486,384 vacancies and 471,508 placements in 1931. In 1932, 25 p.c. fewer placements were effected than in 1931. Slightly more than one-half the total placements were of a casual nature, many of these being the result of work given on a rotation basis by municipalities and provincial governments on various relief schemes throughout the year to persons who, otherwise, would have been unemployed. All provinces, except Nova Scotia, New Brunswick, Quebec and Saskatchewan, showed declines in placements, the largest decline being in Ontario and the greatest gain in Saskatchewan. Construction and maintenance showed the greatest loss of any industrial division and farming the largest gain, this increase being due to the placement of men on farms under the Farm Relief Act.

Reduced Railway Fares.—In order to facilitate the movement of labour in cases where there were not enough workers in any one locality to fill the available vacancies, the Employment Service, by special arrangement with nearly all the members of the Canadian Passenger Association, has been granted the privilege of issuing certificates which entitle the bearers to purchase railway tickets at the reduced rate of 2·7 cents per mile. This rate is for a second class ticket and is applicable only to fares of not less than $4. During 1931, 5,541 certificates were issued, 4,949 to persons proceeding to points within the same province as the despatching office and 592 to workers going to points in other provinces. During 1932, 3,669 certificates for special rates were granted, 2,945 to persons travelling to employment within the same province as the despatching office and 724 to persons for whom employment had been secured in other provinces.

17.—Applications for Employment, Positions Offered and Placements Effected by the Employment Service of Canada, by Provinces, 1931-32,[1] and for Canada, 1920-32.

Province.	Year.	Applications Registered.		Vacancies Notified.		Placements Effected.	
		Men.	Women.	Men.	Women.	Men.	Women.
Nova Scotia	1931	6,516	5,150	5,964	4,439	5,948	3,977
	1932	9,054	4,795	8,406	3,814	8,400	3,530
New Brunswick	1931	6,735	4,700	5,975	4,725	5,923	4,638
	1932	7,770	4,151	7,042	4.143	7,041	4,110
Quebec	1931	44,092	17,442	8,581	10,783	8,299	8.585
	1932	43,444	27,019	7,478	13,649	7,030	10,757
Ontario	1931	333,605	66,000	221,773	41,022	220,750	32,493
	1932	235,137	62.593	131,445	31,944	130,335	26,550
Manitoba	1931	67,268	17,446	34,298	14,206	34,399	13,841
	1932	50,795	14,014	32,597	11,167	33,140	10,954
Saskatchewan	1931	32,017	9,777	25,657	7,296	24,911	6,893
	1932	31,186	9,129	28,755	8,316	26,651	7,236
Alberta	1931	81,207	9,336	48,347	5,896	48,154	5,741
	1932	65,382	7,995	34,277	5,325	33,848	5,086
British Columbia	1931	114,020	10,842	41,262	6,160	40,847	6,109
	1932	69,927	10,037	32,643	5,027	32,530	5,016
Canada	**Totals, 1920**	**480,735**	**96,054**	**450,526**	**116,142**	**365,292**	**80,520**
	Totals, 1921	**438,836**	**105,563**	**325,498**	**106,097**	**277,792**	**77,964**
	Totals, 1922	**443,875**	**104,407**	**365,529**	**104,359**	**316,386**	**77,136**
	Totals, 1923	**473,483**	**115,692**	**431,576**	**109,404**	**376,801**	**85,751**
	Totals, 1924	**402,593**	**116,782**	**314,258**	**97,810**	**285,359**	**80,773**
	Totals, 1925	**439,022**	**118,023**	**345,570**	**101,473**	**328,334**	**84,491**
	Totals, 1926	**417,965**	**124,504**	**345,163**	**111,769**	**319,558**	**90,597**
	Totals, 1927	**422,022**	**131,849**	**339,478**	**114,095**	**320,306**	**94,463**
	Totals, 1928	**454,525**	**142,968**	**376,791**	**129,635**	**361,942**	**108,386**
	Totals, 1929	**397,527**	**153,199**	**296,592**	**131,435**	**287,128**	**111,239**
	Totals, 1930	**463,103**	**149,887**	**278,835**	**107,199**	**274,227**	**94,452**
	Totals, 1931	**685,460**	**140,693**	**391,857**	**94,527**	**389,231**	**82,277**
	Totals, 1932	**512,695**	**139,733**	**282,643**	**83,385**	**278,975**	**73,239**

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[1] Figures by provinces and years for 1920–25 will be found at p. 703 of the 1926 Year Book, for 1926–28 at p. 731 of the 1930 Year Book, and for 1929–30 at p. 773 of the 1931 Year Book.

Subsection 2.—Unemployment as Reported by Trade Unions.

Monthly statistics on unemployment are compiled and published by the Employment Service Branch of the Dominion Department of Labour, based on returns received from 1,800 local trade unions having an aggregate membership of nearly 175,000 workers. "Unemployment" as here used means involuntary idleness, due to economic causes. Persons engaged in work other than their own trades, or idle because of illness, are not considered as unemployed, while unions involved in industrial disputes are excluded from the tabulations. As the number of unions making returns varies from month to month, with consequent variation in the membership upon which the percentages of unemployment are based, it should be understood that the figures for each month have reference only to the reporting organizations. Table **18** is a record of unemployment in trade unions, for the past 18 years, by provinces. The maximum of unemployment in 1932 was in December, when the percentage stood at 25·5; in 1931 the December figure of 21·1 p.c. constituted the maximum. In 1931 the minimum, reached in April, was 14·9 p.c., while the 1932 low was 20·4 p.c. recorded in both March and September. Employment among organized workers, as indicated by these statistics, was less active on the average in 1932 than 1931, the average of the monthly figures of unemployment for 1932 being 22·0 p.c., while for 1931 the corresponding figure was 16·8 p.c.

18.—Percentages of Unemployment in Trade Unions, by Provinces, half-yearly, 1915-31, and by months, 1932.

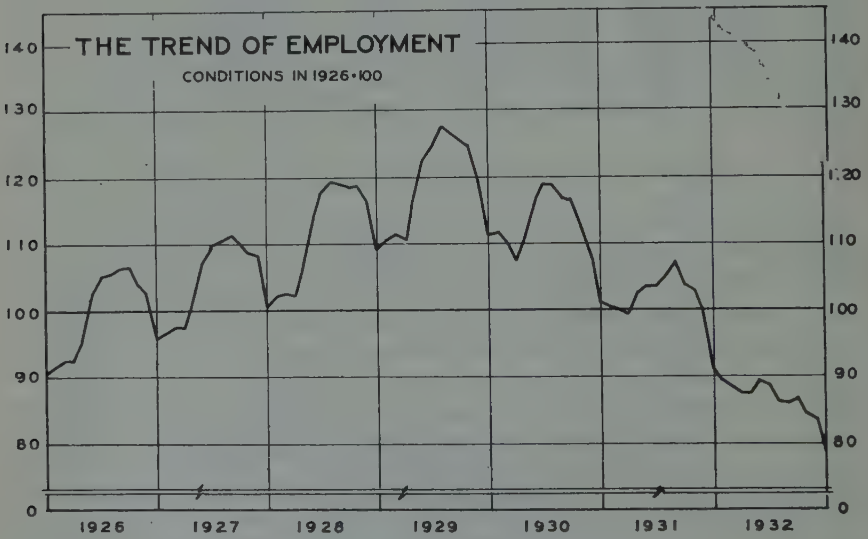
NOTE.—For the percentages of unemployment for 12 months in 1921 and 1922, see p. 732 of the 1922-23 Year Book; for 12 months in 1923, p. 688 of the 1924 Year Book; for 12 months in 1924, p. 700 of the 1925 Year Book; for 12 months in 1925, p. 704 of the 1926 Year Book; for 12 months in 1926, p. 757 of the 1927-28 Year Book; for 12 months in 1927, p. 745 of the 1929 Year Book; for 12 months in 1928 and 1929, p. 733 of the 1930 Year Book; for 12 months in 1930, p. 774 of the 1931 Year Book, and for 12 months in 1931, p. 651 of the 1932 Year Book.

Month.	Year.	Nova Scotia and P.E.I.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada.
Dec	1915	0·4	0·7	9·5	8·1	3·2	7·0	4·3	14·8	7·9
June	1916	0·5	0·9	1·8	1·7	1·2	2·6	3·1	5·4	2·1
Dec	1916	0·4	0·2	3·7	1·6	1·0	1·6	1·7	2·4	2·0
June	1917	0·2	0·2	2·5	0·9	0·6	0·3	0·8	1·8	1·2
Dec	1917	2·6	4·1	3·2	2·4	1·1	2·4	1·6	3·2	2·5
June	1918	0·2	0·3	0·4	0·4	0·3	0·2	0·4	0·9	0·4
Dec	1918	2·0	0·4	2·2	2·9	1·3	2·2	2·1	4·0	2·5
June	1919	2·7	2·4	4·0	1·8	1·2	2·5	1·7	3·4	2·6
Dec	1919	1·5	2·0	3·2	1·9	5·0	6·0	2·8	18·6	4·3
June	1920	0·6	0·4	3·1	1·6	1·4	2·2	1·2	5·8	2·1
Dec	1920	6·9	11·0	19·6	12·3	7·8	10·1	9·2	11·6	13·0
June	1921	14·3	11·7	20·7	6·7	8·0	6·8	9·4	24·4	13·2
Dec	1921	5·9	6·9	26·8	9·7	15·5	10·4	6·8	24·7	15·1
June	1922	7·2	3·5	5·4	3·9	6·7	5·0	7·1	7·1	5·3
Dec	1922	3·2	6·1	7·8	4·7	7·8	4·1	5·1	13·3	6·4
June	1923	2·2	1·0	5·7	1·6	5·6	1·3	4·5	4·0	3·4
Dec	1923	7·3	3·6	9·7	6·4	6·5	4·2	6·0	7·1	7·2
June	1924	6·4	5·2	9·4	4·9	4·9	2·3	3·7	2·2	5·8
Dec	1924	4·7	6·9	22·4	8·1	8·9	4·2	5·0	10·2	11·6
June	1925	3·4	3·4	10·2	3·8	4·3	2·4	10·8	4·1	6·1
Dec	1925	4·3	3·0	14·2	6·4	3·8	3·5	4·4	6·9	7·9
June	1926	3·8	1·6	8·9	1·9	2·6	0·8	4·9	2·6	4·1
Dec	1926	3·2	2·2	7·6	5·6	4·3	2·1	6·7	7·5	5·9
June	1927	1·8	2·3	4·0	3·1	2·6	1·1	4·6	2·7	3·2
Dec	1927	4·3	1·5	9·3	5·1	5·4	5·6	3·7	10·5	6·6
June	1928	0·5	0·8	5·6	2·4	2·1	1·1	3·3	3·6	3·2
Dec	1928	3·9	0·9	10·7	4·0	8·1	4·4	6·9	6·9	6·6
June	1929	3·3	1·0	2·9	2·5	3·1	2·8	4·3	2·6	2·9
Dec	1929	5·2	2·4	14·5	9·7	12·8	13·0	13·9	11·5	11·4
June	1930	3·3	2·8	17·5	7·4	9·2	8·9	14·3	8·4	10·6
Dec	1930	7·5	8·7	22·8	17·3	14·2	15·9	13·8	16·8	17·0
June	1931	7·2	6·5	20·0	16·2	14·1	13·5	21·7	15·6	16·3
Dec	1931	13·8	9·6	29·0	20·3	16·5	19·5	16·9	21·2	21·1
Jan	1932	15·1	15·9	28·4	21·5	19·0	18·0	19·3	21·8	22·0
Feb	1932	8·3	14·9	23·1	23·0	19·6	19·5	20·2	21·1	20·6
Mar	1932	8·0	13·3	23·5	21·6	20·7	17·6	23·2	20·5	20·4
April	1932	8·9	16·0	28·1	24·0	21·9	16·9	26·1	21·5	23·0
May	1932	8·5	14·2	26·3	23·6	21·0	14·0	26·5	20·4	22·1
June	1932	9·6	12·0	27·1	23·4	18·1	14·4	23·4	22·3	21·9
July	1932	8·0	13·2	26·2	24·4	19·7	13·7	25·5	20·5	21·8
Aug	1932	8·9	13·7	25·0	23·9	18·2	13·0	24·0	19·9	21·4
Sept	1932	11·7	13·1	23·6	23·1	18·7	11·0	19·1	19·7	20·4
Oct	1932	11·5	16·7	27·6	22·7	21·4	13·4	21·7	21·1	22·0
Nov	1932	7·9	13·6	27·6	25·2	20·6	17·3	19·8	24·4	22·8
Dec	1932	8·4	16·5	30·9	28·5	20·9	20·8	22·8	26·0	25·5

Subsection 3.—Employment as Reported by Employers.

The Dominion Bureau of Statistics tabulates monthly reports of the numbers employed by firms having 15 or more persons on their staffs; the returns are representative of practically every industry except agriculture and the more specialized business and professional callings. During 1932 about 7,900 of these employers reported an average working force of 801,356 persons, varying from 835,960 on Jan. 1 to 765,441 at the beginning of December. In Canada, as in other parts of the world, industrial employment continued slack during 1932, activity generally being at a lower level than in any other year since 1922. An important factor in this connection was the substitution of a policy of direct relief for the unemployed for the former one of large public works, the extent to which this has effected the index number being indicated by the fact that the number of man-days worked on state-aided projects was 11,135,334 in 1931 and 7,630,109 in 1932. These figures apply to those projects where the work was carried out on a wage basis; in addition, there were a large number of man-days worked where the work was on a subsistence basis.

The trend was generally downward from the opening of 1932 to the close of the year, the slight gains recorded on June 1 and Oct. 1 being immediately followed by sharp recessions. The following chart illustrates the trend of employment generally over the latest seven years.



Employment by Economic Areas.—The five economic areas reported curtailment in employment during 1932. The index, based upon the 1926 average as 100, was maintained at a higher level in the Maritime and Prairie Provinces than elsewhere, but even in those areas the falling-off from 1931 and earlier years of the record was considerable. Firms in Ontario, on the other hand, reported a smaller proportional reduction as compared with the preceding year than was the case in any other of the economic areas. Table **19** is a record of employment in the five economic areas, by months, in 1931 and 1932, with averages for preceding years since 1921.

19.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1931, to December, 1932, with Yearly Averages since 1921.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated economic area to the total reported by all employers making returns in Canada on Dec. 1, 1932.

Year and Month.	Maritime Provinces.	Quebec.	Ontario.	Prairie Provinces.	British Columbia.	Canada.
Averages, 1921	**102·4**	**82·2**	**90·6**	**94·0**	**81·1**	**88·8**
Averages, 1922	**97·3**	**81·4**	**92·8**	**92·6**	**82·8**	**89·0**
Averages, 1923	**105·7**	**90·7**	**99·5**	**94·8**	**87·4**	**95·8**
Averages, 1924	**96·6**	**91·3**	**95·5**	**92·1**	**89·4**	**93·4**
Averages, 1925	**97·0**	**91·7**	**95·8**	**92·0**	**93·7**	**93·6**
Averages, 1926[1]	**99·4**	**99·4**	**99·6**	**99·5**	**100·2**	**99·6**
Averages, 1927	**103·7**	**104·0**	**105·6**	**105·3**	**101·1**	**104·6**
Averages, 1928	**106·6**	**108·3**	**113·8**	**117·9**	**106·4**	**111·6**
Averages, 1929	**114·8**	**113·4**	**123·1**	**126·3**	**111·5**	**119·0**
Averages, 1930	**118·3**	**110·3**	**114·6**	**117·1**	**107·9**	**113·4**
1931.						
Jan. 1	119·3	99·3	100·1	106·4	94·1	101·7
Feb. 1	110·6	98·8	101·7	101·0	93·8	100·7
Mar. 1	104·5	99·7	101·6	98·6	93·8	100·2
April 1	102·3	98·5	102·4	97·7	92·4	99·7
May 1	104·0	102·3	103·8	100·0	96·1	102·2
June 1	105·2	104·3	104·2	103·3	97·9	103·6
July 1	109·4	103·2	102·7	108·9	97·9	103·8
Aug. 1	106·8	102·4	100·7	129·1	98·0	105·2
Sept. 1	102·7	109·8	100·7	130·0	96·6	107·1
Oct. 1	102·6	101·6	99·3	129·1	95·9	103·9
Nov. 1	116·6	96·2	98·1	128·2	98·9	103·0
Dec. 1	112·7	94·7	99·3	106·0	90·5	99·1
Averages	**108·1**	**100·9**	**101·2**	**111·5**	**95·5**	**102·5**
1932.						
Jan. 1	111·1	86·3	93·8	92·8	80·6	91·6
Feb. 1	99·9	85·9	92·7	91·3	77·5	89·7
Mar. 1	93·1	86·5	91·8	88·2	78·7	88·7
April 1	88·3	85·0	91·1	86·1	80·9	87·5
May 1	87·8	86·0	89·5	87·6	82·7	87·5
June 1	96·4	87·8	89·9	89·3	83·7	89·1
July 1	96·4	86·6	89·2	90·5	83·7	88·7
Aug. 1	90·1	84·4	86·9	90·1	81·4	86·3
Sept. 1	87·8	85·3	85·1	91·6	82·8	86·0
Oct. 1	84·9	85·8	86·1	94·6	82·1	86·7
Nov. 1	86·8	83·6	84·2	91·6	77·8	84·7
Dec. 1	83·8	82·9	84·1	86·7	73·8	83·2
Averages	**92·2**	**85·5**	**88·7**	**90·0**	**80·5**	**87·5**
Relative weight of employment in economic areas as at Dec. 1, 1932[2]	7·6	29·3	41·2	14·1	7·8	100·0

[1] Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100. [2] Percentages of Dominion total.

Employment in Cities.—Separate tabulations are made for the eight leading industrial centres: Montreal, Quebec, Toronto, Ottawa, Hamilton, Windsor and the adjoining "Border Cities", Winnipeg and Vancouver. These cities recorded on the whole a lower level of activity than in 1931. The reports show that employment was generally brisker in Ottawa and Quebec than in the other centres enumerated, while the lowest indexes were reported in Hamilton and Windsor and the adjoining Border Cities. Table **20** gives monthly indexes in the cities in 1931 and 1932, with yearly averages since 1922.

20.—Index Numbers of Employment as Reported by Employers in Leading Cities, as at the First of each Month, January, 1931, to December, 1932, with Yearly Averages since 1922.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated city to the total reported by all employers making returns in Canada on Dec. 1, 1932.

Year and Month.	Montreal.	Quebec.	Toronto.	Ottawa.	Hamilton.	Windsor.[2]	Winnipeg.	Vancouver.
Averages, 1922	**86·0**	–	**96·1**	–	–	–	**93·9**	**81·5**
Averages, 1923	**92·7**	–	**98·0**	**107·2**	**94·6**	–	**90·6**	**82·5**
Averages, 1924	**93·0**	**99·6**	**94·3**	**102·3**	**86·0**	–	**86·5**	**86·2**
Averages, 1925	**94·2**	**97·9**	**95·7**	**100·1**	**88·0**	**85·1**	**88·5**	**92·6**
Averages, 1926[1]	**99·7**	**99·1**	**99·6**	**100·0**	**99·3**	**99·9**	**99·2**	**99·9**
Averages, 1927	**103·0**	**111·3**	**105·7**	**107·7**	**103·1**	**86·2**	**104·1**	**100·7**
Averages, 1928	**108·2**	**119·9**	**112·1**	**115·8**	**108·2**	**137·3**	**110·1**	**104·3**
Averages, 1929	**115·3**	**124·2**	**121·3**	**120·7**	**128·4**	**153·2**	**112·3**	**109·2**
Averages, 1930	**111·8**	**125·3**	**116·3**	**123·1**	**113·9**	**128·6**	**107·6**	**109·8**
1931.								
Jan. 1	102·4	127·0	107·5	112·6	103·5	89·4	98·2	107·0
Feb. 1	102·8	120·7	107·1	113·4	106·1	96·9	96·8	108·4
Mar. 1	105·1	123·3	107·5	117·5	105·6	95·5	98·0	108·2
April 1	106·2	122·2	109·5	121·8	109·8	104·2	97·3	101·9
May 1	107·0	125·7	111·4	123·4	108·0	105·5	97·1	104·6
June 1	107·1	126·7	110·3	123·4	103·9	99·5	98·8	106·9
July 1	105·1	122·2	109·0	121·0	98·4	94·2	99·9	106·0
Aug. 1	102·5	122·0	106·3	122·8	97·6	75·1	98·1	106·0
Sept. 1	102·3	123·2	106·6	121·7	95·8	77·8	98·2	104·5
Oct. 1	97·3	124·2	107·3	124·5	96·1	80·9	96·4	99·7
Nov. 1	95·4	120·0	105·6	118·6	96·3	67·7	93·5	101·9
Dec. 1	96·7	108·7	104·8	112·7	94·0	72·3	93·2	98·3
Averages	**102·5**	**122·2**	**107·7**	**119·5**	**101·3**	**88·3**	**97·1**	**104·5**
1932.								
Jan. 1	88·0	100·8	99·6	108·9	91·3	83·5	92·5	91·1
Feb. 1	87·4	100·9	97·8	104·5	90·2	81·4	89·6	90·1
Mar. 1	89·8	101·9	97·8	96·6	90·4	80·4	88·5	87·8
April 1	91·2	102·0	97·8	101·7	87·4	89·8	86·8	87·8
May 1	91·1	104·0	97·5	102·5	86·9	88·3	86·1	87·6
June 1	91·7	105·6	96·8	100·9	84·9	91·0	85·2	89·4
July 1	88·6	104·8	94·6	99·3	84·4	89·6	87·0	88·7
Aug. 1	85·5	101·0	92·3	97·6	80·6	80·0	86·0	87·9
Sept. 1	86·3	105·8	91·6	98·0	77·1	71·8	85·1	89·0
Oct. 1	88·0	100·2	93·5	94·4	77·6	58·7	85·6	88·5
Nov. 1	84·8	98·5	92·5	94·1	77·8	62·5	84·3	87·9
Dec. 1	85·1	95·9	91·2	92·6	76·6	63·7	82·2	85·8
Averages	**88·1**	**101·8**	**95·2**	**99·3**	**83·7**	**78·4**	**86·6**	**88·5**
Relative weight, by cities, as at Dec. 1, 1932[3]	16·4	1·6	14·3	1·5	3·1	1·1	4·5	3·4

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[1] Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here shown for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100. [2] Includes adjacent "Border Cities". [3] Percentages of Dominion total.

Employment by Industries.—Employment in all industries was in smaller volume than in 1931. Within the manufacturing industries, only the tobacco, leather, hosiery and knitting, woollen and silk groups showed improvement in this comparison. The declines in the animal food, lumber, pulp and paper, rubber, textile, iron and steel, non-ferrous metal and mineral product industries, however, were on a smaller scale than those reported in 1931, as compared with 1930. Table 21 gives index numbers of employment by main industrial groups.

21.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1931, to December, 1932, with Yearly Averages since 1921.

Note.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated industry to the total reported by all employers making returns in Canada on Dec. 1, 1932.

Year and Month.	Manufacturing.	Logging.	Mining.	Communications.	Transportation.	Construction and Maintenance.	Services.	Trade.	All Industries.
Averages, 1921	**87·7**	**103·0**	**98·0**	**90·2**	**94·1**	**71·1**	**83·6**	**92·7**	**88·8**
Averages, 1922	**88·3**	**85·1**	**99·5**	**86·4**	**97·8**	**76·7**	**81·9**	**90·8**	**89·0**
Averages, 1923	**96·6**	**114·2**	**106·2**	**87·6**	**100·3**	**80·9**	**87·9**	**92·1**	**95·8**
Averages, 1924	**92·4**	**116·7**	**105·3**	**93·7**	**99·1**	**80·3**	**93·8**	**92·5**	**93·4**
Averages, 1925	**93·0**	**105·4**	**99·8**	**95·5**	**96·6**	**84·9**	**95·4**	**95·1**	**93·6**
Averages, 1926[1]	**99·6**	**99·5**	**99·7**	**99·6**	**99·7**	**99·2**	**99·5**	**99·2**	**99·6**
Averages, 1927	**103·4**	**109·3**	**107·0**	**103·8**	**102·5**	**109·0**	**106·2**	**107·4**	**104·6**
Averages, 1928	**110·1**	**114·5**	**114·4**	**108·2**	**105·9**	**118·8**	**118·1**	**116·1**	**111·6**
Averages, 1929	**117·1**	**125·8**	**120·1**	**120·6**	**109·7**	**129·7**	**130·3**	**126·2**	**119·0**
Averages, 1930	**109·0**	**108·0**	**117·8**	**119·8**	**104·6**	**129·8**	**131·6**	**127·7**	**113·4**
1931.									
Jan. 1	93·7	107·6	114·4	110·6	95·5	110·7	123·2	132·9	101·7
Feb. 1	96·1	102·2	111·6	106·6	94·0	104·5	122·2	123·1	100·7
Mar. 1	97·6	82·7	109·5	103·9	93·2	101·1	121·8	122·0	100·2
April 1	99·7	42·9	108·1	103·3	94·3	96·8	122·0	123·1	99·7
May 1	100·7	55·9	106·0	104·0	96·6	106·6	123·1	123·3	102·2
June 1	99·4	53·3	105·3	104·7	98·6	121·8	125·9	124·0	103·6
July 1	97·2	38·5	104·1	104·8	97·7	137·1	130·8	124·0	103·8
Aug. 1	94·7	28·8	104·5	105·9	97·8	162·8	133·0	120·9	105·2
Sept. 1	94·7	30·5	105·6	105·8	97·8	176·8	134·8	120·5	107·1
Oct. 1	91·8	42·2	108·2	104·2	95·2	164·5	125·5	120·8	103·9
Nov. 1	88·8	63·7	107·9	102·4	95·4	165·4	117·5	122·8	103·0
Dec. 1	89·6	73·1	107·5	100·5	93·5	128·8	116·1	125·6	99·1
Averages	**95·3**	**60·1**	**107·7**	**104·7**	**95·8**	**131·4**	**124·7**	**123·6**	**102·5**
1932.									
Jan. 1	83·9	68·7	105·1	98·1	85·6	104·8	114·4	125·7	91·6
Feb. 1	85·9	68·5	102·4	97·3	83·4	90·4	112·1	117·2	89·7
Mar. 1	87·0	60·6	101·1	95·2	81·9	83·3	114·7	113·6	88·7
April 1	87·3	31·1	101·0	93·9	81·9	79·9	113·9	114·3	87·5
May 1	85·8	32·5	97·9	94·1	84·3	83·2	114·7	116·2	87·5
June 1	86·0	37·9	96·8	94·1	85·5	92·9	116·8	116·1	89·1
July 1	85·4	34·2	95·0	93·1	85·9	93·3	119·9	115·4	88·7
Aug. 1	82·6	29·1	94·8	93·5	85·3	90·0	117·0	113·8	86·3
Sept. 1	83·1	26·0	96·5	92·9	86·5	84·4	119·4	113·1	86·0
Oct. 1	84·1	28·4	98·2	91·2	87·2	84·3	109·8	114·5	86·7
Nov. 1	81·7	37·9	101·2	89·6	84·5	77·9	106·5	115·4	84·7
Dec. 1	80·3	56·2	99·9	89·3	83·9	67·6	103·7	117·8	83·2
Averages	**84·4**	**42·6**	**99·2**	**93·5**	**84·7**	**86·0**	**113·6**	**116·1**	**87·5**
Relative weight, by industries, as at Dec. 1, 1932[2].	52·1	2·0	5·9	3·1	12·9	10·2	2·6	11·2	100·0

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[1] Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100. [2] Percentages of Dominion total.

Subsection 4.—Unemployment Relief.

The Unemployment Relief Act of 1930, effective in September of that year, covered expenditures for carrying on public works and giving direct relief to relieve unemployment until August, 1931. Under the provisions of this Act, the Dominion Government contributed $14,396,957 to public works, and $3,556,811 to direct relief. The total cost of administration was $43,062 and the total expenditure by the Dominion Government $17,996,830. This expenditure resulted in public works, etc., being carried on to the value of approximately $69,000,000, including contributions of provinces and municipalities. The direct relief expenditures by the Dominion, provinces and municipalities, totalled about $11,000,000. The carrying on of the work under the provisions of the 1930 Act afforded work to 337,633 individuals for varying periods, the amount of work thus afforded being 7,481,449 man-days.

In August, 1931, the Unemployment and Farm Relief Act, 1931, became effective and contributions were made for the relief of unemployment under this Act until Mar. 1, 1932, and under the Continuance Act of 1932, operations under the 1931 Act were continued until May 1, 1932. Under the 1931 Act, the Dominion Government agreed to contribute the sum of $33,990,172 towards the carrying on of works by the provinces, municipalities, and the Dominion departments, for the relief of unemployment, the total cost of such works being approximately $81,000,000. Some of this work was not finished at the expiration of the agreements on May 1, 1932, but extensions of time were arranged to different dates extending to the end of 1932, the gross cost of the works thus extended being approximately $14,778,000. For direct relief the expenditures of the Dominion Government, under the 1931 Act, amounted to $11,643,306 at Dec. 31, 1932. This included $5,288,085 apportioned to the Saskatchewan Relief Commission. Expenditures for public works gave employment to 582,641 individuals to the end of November, 1932, the total wages paid being $39,311,188 and a total of 13,251,601 man-days work being afforded.

After a survey of employment conditions in the shops of the Canadian National Railways, it was decided to maintain operations so as to permit of intermittent employment being given to a large number of employees. In September, 1931, the Canadian Pacific Railway Company was compelled to shut down its shops and upon application being made to the Government for assistance, it was arranged with the Company that its shops should be opened on Nov. 17, 1931, and kept open until Dec. 31 of the same year, the Government paying the wages of workers employed in the said shops. The Railway Company, however, was to reimburse the Government for expenditures so made, without interest, when the earnings of the Company enabled it to resume payment of dividends at more than the rate of 5 p.c. per annum. The total number of railway shop employees thus given employment was 8,455, the wages involved totalling $1,447,222. The cost of administration under 1931 legislation was $84,488.

The Relief Act of 1932.—The Relief Act, 1932, received assent on May 13, 1932. Under this Act agreements have been completed with all the provinces, except Prince Edward Island, providing for a Dominion non-recoverable expenditure of one-third of an amount not to exceed $600 per family for the purpose of providing a measure of self-sustaining relief to families who would otherwise be in receipt of direct relief, by placing such families on the land. It is provided that the remaining two-thirds of the expenditure will be contributed by the province and the municipality concerned.

The settlement this year represents only the beginning of the movement, as the agreements with the provinces cover a period of two years and do not expire until Mar. 31, 1934, but a recent report of progress received from the provinces indicates that 1,650 families have been approved, these families having approximately 6,859 dependants.

The Dominion Government has continued to contribute on the same basis as under the 1931 Act to direct relief accounts received from the provinces, or from the municipalities through the provinces, and has also agreed to contribute 50 p.c. to the cost of operating board camps wherein the unemployed may be cared for and given useful work to do in return for subsistence and a small cash allowance. Under the 1932 Act, accounts have been received and paid for direct relief amounting to $3,953,052.

Agreements have been entered into with the four western provinces whereby the Dominion pays 100 p.c. of the cost of providing food, fuel, clothing and shelter to single homeless unemployed persons at a cost not exceeding 40 cents per diem. The agreements also provide for the placement of single homeless persons on farms at $5 per month payable by the Dominion. The agreements are effective from Nov. 1 and 15, 1932, but to date no statement of expenditures has been received. At Nov. 30 the Commissions administering relief to single homeless persons reported the following numbers being taken care of under the arrangements: Manitoba, 5,398; Saskatchewan, 2,901; Alberta, 5,993; British Columbia, 12,854.

The total advances made to the Saskatchewan Relief Commission as at Dec. 31, 1932, for relief purposes, and not including advances made for the purchase of seed grain or for seeding operations, amounted to $10,250,000 ($5,250,000 under the 1931 Act, and $5,000,000 under the 1932 Act). Up to the same date the Relief Commission had furnished the Department of Labour with certificates approved by the provincial authorities covering expenditures chargeable to the Dominion to the extent of $8,188,188. Up to Nov. 30, 1932, 60,000 families with 270,000 dependants had been given relief by the Relief Commission. In addition, aid was given to 827 individual cases, the total number given relief being 330,827. The cost of administration under the 1932 legislation to Dec. 31, 1932, was $49,750.

Subsection 5.—Employment and Unemployment Statistics of the Census.

The group of "wage earners" is one of three into which the "gainfully occupied" population is divided at the census. The other two are described as "employers" and as workers "on own account", respectively, the workers "on own account" including such classes as farmers, country blacksmiths, small storekeepers, doctors, lawyers and others who give their own time and labour to their occupation, and do not employ others therein. The "wage earners" are much the largest of the three groups, and, as defined by the census, include each and every person "who works for salary or wages, whether he be the general manager of a bank, railway or manufacturing establishment or a day labourer".

At the census of June 1, 1931, a comprehensive investigation was made of the problem of "unemployment" among the wage earners of Canada. In the first place, every wage earner in the country was asked whether or not he was at work on the date of the census, Monday, June 1, 1931, and those who answered in the negative were further asked the reason for not being at work on the above date, the reasons to be stated under such headings as "no job", "temporary lay-off", "strike or lock-out", "illness", "accident", etc. This investigation was made in order to get a clear and sharply defined conspectus of the employment situation at a particular point of time.

In the second place, every wage earner in the country was asked to state how many weeks he had been out of work during the twelve months preceding the date of the census—that is, how many weeks he had been out of work between June 1, 1930 and June 1, 1931, together with the number of weeks out of work for each of the specified causes, "no job", "temporary lay-off", "illness", "accident", "strike or lockout", "other causes". A comprehensive analysis of the information secured under this second heading, classified by occupation, birthplace, citizenship, etc., is in progress.

Wage Earners at Work and not at Work on June 1, 1931.—The grand total number of persons in the Dominion coming within the census definition of "wage earners" was 2,564,879 at the date of the census. Of this total, 2,093,211 or 81·39 p.c. were actually at work on that date, while 471,668 or 18·61 p.c. were not then at work. In other words, out of every 10,000 wage earners in the Dominion 8,139 were at work and 1,861 were not at work on June 1, 1931. Of those not at work, 392,809 stated the reason as "no job". In the consideration of this figure it has to be remembered that even in times of great industrial activity there are always many thousands of workers "between jobs", while many thousands more are casual labourers, who may have "no jobs" to-day but may be employed to-morrow. This figure of 392,809, being 15·32 p.c. of all the wage earners of the Dominion, or 1,532 out of every 10,000, may be regarded as giving the number of "the unemployed", in the ordinary meaning of the term, as at the date of the census. Approximately five out of every six who were not at work on June 1, 1931, gave the reason as "no job".

The other reasons advanced by wage earners for not having been at work on June 1, 1931, were of less importance. The considerable total of 42,443 reported that they were not at work owing to "temporary lay-off". This number, however, was only 1·66 p.c. of the wage earners of the Dominion or one out of every sixty. Further, these wage earners had a job to go back to, so that their position was quite different from that of those reporting "no job". "Strike or lockout" was given as the reason for not being at work on June 1 in only 379 cases, so that only about one out of every 7,000 wage earners in the country was not at work as the result of an industrial dispute—an excellent record in the circumstances.

Personal reasons were assigned by those not at work on June 1, 1931, in 30,177 cases, including 25,718 cases of illness and 4,459 cases of accident. The 25,718 constitute about one per cent of the grand total number of wage earners in the country, and this might be taken to indicate that the average toll taken by illness among our wage-earning population is about one per cent of normal full time or about three days in the working year. "Accident" cases were responsible for about one-sixth of one per cent of the wage earners not being at work on the date of the census—one person out of every six hundred. Thus "accident" would appear to be a minor cause of loss of time, averaging half a day per wage earner per annum.

When the distinction of sex is made, it is at once observed that the females "not at work" on June 1, 1931, are a much smaller percentage of the total female wage earners than the males "not at work" are of the total male wage earners. Out of 2,017,606 male wage earners in Canada on the date of the census, 1,594,612 or 79·03 p.c. of the total were at work and 422,994 or 20·97 p.c. were not at work. On the other hand, out of a total of 547,273 female wage earners in Canada at the date of the census, 498,599 or 91·11 p.c. were at work and only 48,674 or 8·89 p.c. were not at work. Thus the percentage "not at work" among male wage earners was considerably more than twice as large as among female wage earners.

If the wage earners with "no job"—the really "unemployed"—at the date of the census are compared the same conclusion is reached. Out of 2,017,606 male wage earners resident in Canada at the date of the census, 356,549 or 17·68 p.c., or rather more than one-sixth, had "no job" *i.e.*, were unemployed at the date of the census. Out of 547,273 female wage earners, however, only 36,260 or 6·63 p.c. of the total had "no job". In other words, one out of every six male wage earners and one out of every fifteen female wage earners was unemployed at the date of the census.

Reasons other than "no job" were given for not being at work on June 1, 1931, by 3·29 p.c. of all male wage earners and by 2·26 p.c. of all female wage earners. Among these reasons "temporary lay-off" accounted for 1·83 p.c. of all male wage earners and 1·00 p.c. of all female wage earners not being at work on the date of the census. Again, "strike or lockout" accounted for the absence from work of 353 males and of only 26 females.

Among the personal reasons for not being at work, "illness" bulked equally large among male and among female wage earners, 1·00 p.c. of each sex being not at work on June 1, 1931, for this reason. On the other hand, the greater hazards to which males are subjected in the course of their employment and outside of it are shown by the fact that 0·21 p.c. of all male wage earners and only 0·04 p.c. of all female wage earners were not at work on June 1, 1931, as a result of accidents.

22.—Wage Earners of Canada at Work and Not at Work on Monday, June 1, 1931, by Sex and Province, with Reasons Given by those Not at Work. (Preliminary figures.)

Province.		Total Number of Wage-earners.	Number at Work June 1., 1931.	Number Not at Work June 1., 1931.	Reasons Given by those Not at Work						
					No Job.	Temporary Lay-off.	Strike or Lockout.	Illness.	Accident.	Other Reasons.	Reasons not Stated.
					No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	Total	12,291	11,456	835	620	47	–	127	11	30	–
	Male	9,117	8,407	710	540	41	–	93	10	26	–
	Female	3,174	3,049	125	80	6	–	34	1	4	–
Nova Scotia	Total	117,444	94,408	23,036	14,123	5,972	2	1,826	378	328	407
	Male	94,854	73,281	21,573	13,212	5,802	2	1,560	372	283	342
	Female	22,590	21,127	1,463	911	170	–	266	6	45	65
New Brunswick	Total	83,761	67,007	16,754	14,061	910	5	959	199	163	457
	Male	65,892	50,507	15,385	13,206	750	5	745	188	120	371
	Female	17,869	16,500	1,369	855	160	–	214	11	43	86
Quebec	Total	693,351	576,394	116,957	100,442	6,108	81	8,128	1,108	500	590
	Male	532,401	429,054	103,347	90,126	4,836	73	6,489	1,043	315	465
	Female	160,950	147,340	13,610	10,316	1,272	8	1,639	65	185	125
Ontario	Total	963,636	803,601	160,035	130,268	17,146	80	9,302	1,344	850	1,045
	Male	751,019	608,834	142,185	117,749	14,579	65	7,083	1,261	633	815
	Female	212,617	194,767	17,850	12,519	2,567	15	2,219	83	217	230
Manitoba	Total	170,792	134,263	36,529	32,176	2,264	16	1,378	244	114	337
	Male	132,901	100,783	32,118	28,566	1,895	13	1,067	227	77	273
	Female	37,891	33,480	4,411	3,610	369	3	311	17	37	64
Saskatchewan	Total	145,445	116,568	28,877	26,326	1,267	5	903	137	69	170
	Male	116,058	90,055	26,003	23,877	1,136	5	677	133	43	132
	Female	29,387	26,513	2,874	2,449	131	–	226	4	26	38
Alberta	Total	142,090	111,391	30,699	24,212	4,735	21	964	234	124	409
	Male	116,089	87,891	28,198	22,119	4,570	21	760	225	94	409
	Female	26,001	23,500	2,501	2,093	165	–	204	9	30	–
British Columbia	Total	234,321	176,477	57,844	50,490	3,992	169	2,122	804	99	168
	Male	197,659	144,283	53,376	47,065	3,360	169	1,783	781	76	142
	Female	36,662	32,194	4,468	3,425	632	–	339	23	23	26
Yukon	Total	1,295	1,193	102	91	2	–	9	–	–	–
	Male	1,214	1,115	99	89	2	–	8	–	–	–
	Female	81	78	3	2	–	–	1	–	–	–
Northwest Territories	Total	453	453	–	–	–	–	–	–	–	–
	Male	402	402	–	–	–	–	–	–	–	–
	Female	51	51	–	–	–	–	–	–	–	–
Canada	**Total**	**2,564,879**	**2,093,211**	**471,668**	**392,809**	**42,443**	**379**	**25,718**	**4,459**	**2,277**	**3,583**
	Male	**2,017,606**	**1,594,612**	**422,994**	**356,549**	**36,971**	**353**	**20,265**	**4,240**	**1,667**	**2,949**
	Female	**547,273**	**498,599**	**48,674**	**36,260**	**5,472**	**26**	**5,453**	**219**	**610**	**634**

Employment and Unemployment in the Twelve Months Preceding the Census.—The total number of wage earners in Canada, at the date of the census, was 2,566,001, of whom 2,018,334 or 78·66 p.c. were males and 547,667 or 21·34 p.c. were females. The number losing some time during the period June 1, 1930 to June 1, 1931, was 1,027,749 or 40·05 p.c. of all wage earners. Among male wage earners 889,731 or 44·08 p.c. of the total lost some time, while 138,018 or 25·20 p.c. of the female wage earners showed some unemployment. The aggregate time loss was 24,508,710 weeks, of which 21,601,757 weeks or 88·14 p.c. represented unemployment among males, and 2,906,953 weeks or 11·86 p.c. unemployment among females.

23.—Wage Earners 10 Years of Age and Over, by Sex, Showing Number Unemployed and Weeks Lost, by Sex, Province and Reason Given, census year ended June 1, 1931—continued on p. 780. (Preliminary figures).

Province.	Total Wage Earners.	Persons Losing no Time.	Persons Unemployed Some Period and Total of Weeks Lost.					
			All Reasons.		No Job.		Temporary Lay-Off.	
			Total Persons.	Total Weeks.	Persons.	Weeks.	Persons.	Weeks.
	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	12,346	9,813	2,533	54,213	2,027	44,817	194	2,477
Males	9,157	7,011	2,146	45,157	1,760	37,791	162	2,067
Females	3,189	2,802	387	9,056	267	7,026	32	410
Nova Scotia	117,772	66,269	51,503	1,170,862	28,754	679,916	18,492	365,793
Males	95,236	48,048	47,188	1,078,865	26,178	616,555	17,626	353,306
Females	22,536	18,221	4,315	91,997	2,576	63,361	866	12,487
New Brunswick	84,238	47,982	36,256	804,343	28,629	674,596	4,792	64,662
Males	66,313	34,209	32,104	719,325	26,224	616,638	3,767	50,317
Females	17,925	13,773	4,152	85,018	2,405	57,958	1,025	14,345
Quebec	694,492	420,129	274,363	6,142,317	219,312	5,201,896	33,649	432,315
Males	533,417	300,867	232,550	5,313,090	189,437	4,561,112	26,386	340,337
Females	161,075	119,262	41,813	829,227	29,875	640,784	7,263	91,978
Ontario	963,637	586,232	377,405	8,816,968	244,331	6,647,391	102,040	1,529,398
Males	750,976	428,510	322,466	7,702,719	215,351	5,913,798	84,069	1,283,086
Females	212,661	157,722	54,939	1,114,249	28,980	733,593	17,971	246,312
Manitoba	170,713	103,545	67,168	1,769,317	51,153	1,513,795	11,457	156,125
Males	132,852	75,711	57,141	1,533,200	44,268	1,322,390	9,422	132,331
Females	37,861	27,834	10,027	236,117	6,885	191,405	2,035	23,794
Saskatchewan	145,440	94,708	50,732	1,348,261	43,812	1,214,359	4,804	71,740
Males	116,055	71,946	44,109	1,184,260	38,578	1,074,434	4,033	62,379
Females	29,385	22,762	6,623	164,001	5,234	139,925	771	9,361
Alberta	142,461	86,205	56,256	1,449,279	41,856	1,148,598	11,609	223,820
Males	116,086	66,105	49,981	1,301,517	37,226	1,027,550	10,643	210,585
Females	26,375	20,100	6,275	147,762	4,630	121,048	966	13,235
British Columbia	234,902	123,369	111,533	2,953,150	87,710	2,544,959	17,804	232,443
Males	198,242	96,196	102,046	2,723,624	80,953	2,358,811	16,317	211,961
Females	36,660	27,173	9,487	229,526	6,757	186,148	1,487	20,482
Canada	**2,566,001**	**1,538,252**	**1,027,749**	**24,508,710**	**747,584**	**19,670,327**	**204,841**	**3,078,773**
Males	**2,018,334**	**1,128,603**	**889,731**	**21,601,757**	**659,975**	**17,529,079**	**172,425**	**2,646,369**
Females	**547,667**	**409,649**	**138,018**	**2,906,953**	**87,609**	**2,141,248**	**32,416**	**432,404**

23.—Wage Earners 10 Years of Age and Over, by Sex, Showing Number Unemployed and Weeks Lost, by Sex, Province and Reason Given, census year ended June 1, 1931—concluded. (Preliminary figures).

Province.	Persons Unemployed Some Period and Total of Weeks Lost.							
	Illness.		Accident.		Strike or Lockout.		Other Causes.	
	Persons.	Weeks.	Persons.	Weeks.	Persons.	Weeks.	Persons.	Weeks.
	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.	376	5,412	34	372	1	9	53	1,126
Males	294	4,321	31	350	1	9	29	619
Females	82	1,091	3	22	-	-	24	507
Nova Scotia	8,322	97,262	1,853	20,480	207	1,050	389	6,361
Males	7,366	84,077	1,827	20,270	207	1,050	261	3,607
Females	956	13,185	26	210	-	-	128	2,754
New Brunswick	4,268	50,800	941	9,896	7	34	360	4,355
Males	3,426	40,087	903	9,664	7	34	234	2,585
Females	842	10,713	38	232	-	-	126	1,770
Quebec	31,922	421,270	4,367	52,428	215	1,799	2,052	32,609
Males	25,683	341,471	4,100	49,496	180	1,622	1,329	19,052
Females	6,239	79,799	267	2,932	35	177	723	13,557
Ontario	44,390	519,842	6,290	69,854	493	4,991	2,571	45,492
Males	33,993	404,519	5,810	64,801	371	3,671	1,901	32,844
Females	10,397	115,323	480	5,053	122	1,320	670	12,648
Manitoba	6,269	80,754	977	12,390	19	194	389	6,059
Males	4,828	62,470	910	11,583	8	50	288	4,376
Females	1,441	18,284	67	807	11	144	101	1,683
Saskatchewan	3,543	49,118	577	6,726	8	108	302	6,210
Males	2,736	36,997	549	6,477	8	108	196	3,865
Females	807	12,121	28	249	-	-	106	2,345
Alberta	4,299	56,734	1,188	14,163	40	300	327	5,664
Males	3,431	45,468	1,140	13,635	39	272	245	4,007
Females	868	11,266	48	528	1	28	82	1,657
British Columbia	9,258	124,998	3,189	41,568	232	1,808	468	7,374
Males	7,717	105,179	3,083	40,348	232	1,808	371	5,517
Females	1,541	19,819	106	1,220	-	-	97	1,857
Canada	**112,647**	**1,406,190**	**19,416**	**227,877**	**1,222**	**10,293**	**6,911**	**115,250**
Males	**89,474**	**1,124,589**	**18,353**	**216,624**	**1,053**	**8,624**	**4,854**	**76,472**
Females	**23,173**	**281,601**	**1,063**	**11,253**	**169**	**1,669**	**2,057**	**38,778**

Section 10.—Old Age Pensions.

The Old Age Pensions Act, 1927.—Legislation respecting Old Age Pensions (R.S.C., 1927, c. 156) was adopted by the Dominion Parliament in 1927. Under the provisions of this statute the Dominion Government reimbursed each province participating in the Dominion scheme to the extent of one-half of the provincial expenditure for old age pensions. An amendment passed at the 1931 session of Parliament (c. 42, Statutes of 1931) provided that the Dominion contribution to the provinces be increased from 50 p.c. to 75 p.c. of the provincial disbursements for old age pensions pursuant to a provincial statute authorizing and providing for the payment of such pensions to the persons and under the conditions specified in the Act and the Regulations made thereunder. Following the enactment of the amendment to the Dominion Act, the Dominion Old Age Pensions Regulations were revised and agreements negotiated with the provinces whereby the Dominion contribution of 75 p.c. of provincial disbursements was made effective from Nov. 1, 1931; the provinces have since been reimbursed on this basis.

Sec. 5 of the Act provides that before any such agreement is made with the province, the scheme for the administration of pensions proposed to be adopted by the province shall be approved by the Governor in Council, and that no change in such scheme shall be made without the consent of the Governor in Council.

Sec. 8 reads as follows:—

> (1) Provision shall be made for the payment of a pension to every person who, at the date of the proposed commencement of the pension:—
> (*a*) is a British subject, or, being a widow, was such before her marriage;
> (*b*) has attained the age of seventy years;
> (*c*) has resided in Canada for the twenty years immediately preceding the date aforesaid;
> (*d*) has resided in the province in which the application for pension is made for the five years immediately preceding the said date;
> (*e*) is not an Indian as defined by the Indian Act;
> (*f*) is not in receipt of an income of as much as three hundred and sixty-five dollars ($365) a year, and
> (*g*) has not made any voluntary assignment or transfer of property for the purpose of qualifying for a pension.
> (2) The receipt of a pension shall not by itself constitute a disqualification from voting at any provincial or municipal election.

Sec. 9 provides that the maximum pension payable shall be $240 yearly, subject to reduction by the amount of the income of the pensioner in excess of $125 a year. The pension authority may accept a transfer of the pensioner's interest in a dwelling house in which he resides, in which case the value of the dwelling will not be computed in calculating the amount of pension payable. The pension authority is entitled to recover out of the estate of any deceased pensioner the amount of pension payments with interest at 5 p.c., subject to the limitation that no claim shall be made for such recovery out of any part of the estate which passes by will or intestacy to any other pensioner or to any other person who has contributed, since the grant of the pension or for the last three years during which the pension has been paid, to the pensioner's support.

Secs. 10, 12, 13 and 14 provide for the distribution of the pension burden among the provinces where the pensioner has resided during the 20 years immediately preceding the grant of the pension. Sec. 11 provides for a reduction of pension where a pensioner has resided for a portion of the 20 years in a province with which no agreement is in force. Sec. 15 provides for a suspension of the pension where a pensioner has transferred his residence to some place out of Canada. It is provided by Sec. 16 that a pension shall not be subject to alienation or transfer by the pensioner or to seizure in satisfaction of any claim against him.

The Governor in Council was empowered by Sec. 19 of the Act to make Regulations pursuant to this section. Existing Regulations were revised and approved by an Order in Council dated Feb. 1, 1932.

During 1932 no additional provinces availed themselves of the provisions of the Dominion Act, and old age pensions continued to be paid in the provinces of Alberta, British Columbia, Manitoba, Ontario and Saskatchewan, and in the Northwest Territories. The New Brunswick Legislature, at its 1930 session, passed an Old Age Pensions Act, while similar legislation was enacted in 1931 by the provinces of Nova Scotia and Prince Edward Island, each Act to come into force on a day to be fixed by proclamation. The Gold Commissioner of Yukon was given authority, by a Yukon Territorial Council Ordinance passed in 1927, to enter into an agreement with the Dominion Government for the purpose of obtaining the benefit of the Old Age Pensions Act for residents in the territory. No proposed scheme of administration for adoption in Yukon has been submitted for the approval of the Governor in Council. An Act was assented to by the Quebec Legislature in 1930 providing for the creation of a commission to study a system of social insurance for the province. On Oct. 30, 1930, a commission of seven members was appointed to study, among other matters, the subject of old age insurance. The fifth report of the commission, published in November, 1932, contained its findings on the subject of old age insurance. The majority report of the commission declared in favour of "a contributory and obligatory system of old age insurance", but that, pending the establishment of such a system, recommendation is made that "the Province of Quebec should at the earliest possible opportunity accept, as a temporary and transitory measure, the establishment here of the system of old age pensions now sanctioned by the Dominion law". At present Quebec is the only province which has not enacted old age pensions legislation and, under the terms of the Dominion Act, is therefore ineligible to enter into agreement with the Dominion Government to obtain the benefit of the provisions of the Dominion Act.

The percentage of old age pensioners born in Canada to all such pensioners was 62 and that of pensioners born in the British Isles 24, so that 86 p.c. of those receiving old age pensions in Canada were born either in Canada or in the British Isles. Pensioners born in the United States represented 3 p.c. of the total number of pensioners. Statistics showing the countries of origin, conjugal condition and previous residence in provinces other than that in which the pension was being drawn, were given at pp. 662-663 of the 1932 edition of the Year Book for the calendar year 1931. Table **24** is a financial summary of old age pensions in Canada as at the end of the calendar year 1932.

24.—Financial Summary of Old Age Pensions in Canada, by Provinces, as at Dec. 31, 1932.

Item.	Alberta. — Act Effective Aug. 1, 1929.	British Columbia. — Act Effective Sept. 1, 1927.	Manitoba. — Act Effective Sept. 1, 1928.	Ontario. — Act Effective Nov. 1, 1929.	Saskatchewan. — Act Effective May 1, 1928.	North-west Territories. — Order in Council Effective Jan. 25, 1929.	Total.
Numbers of pensioners as at Dec. 31, 1932	5,105	6,945	8,032	42,315	8,113	6	70,516
Average monthly pensions...$	18·92	18·73	19·38	18·29	18·34	20·00	–
Percentages of pensioners to total population[1]	0·69	1·00	1·15	1·23	0·88	0·06	–
Percentages of persons over 70 years of age to total population[1]	1·93	3·00	2·57	4·11	1·91	0·95	–
Percentages of pensioners to population over 70 years of age[1]	36·11	33·37	44·59	29·93	46·02	6·45	–
Total amounts of pensions paid since inception of Old Age Pensions Act to Dec. 31, 1932...$	2,668,409	5,859,899	5,898,572	25,729,215	5,560,111	4,784	45,720,990
Dominion Government's shares of expenditure...$	1,638,508	3,375,691	3,454,573	15,480,624	3,294,935	4,784	27,249,115

[1] These percentages are based on the figures of the decennial census, 1931.

Section 11.—The Co-operative Movement in Canada.

A general article on "The Co-operative Movement in Canada" appeared at pp. 704–720 of the 1925 edition of the Year Book under the three sub-headings of "Consumers' Co-operation", "Co-operative Credit", and "Producers' Co-operation".[1] Because of the pressure upon space, this article is not reprinted here, but a digest of the latest available material on each of these three sub-divisions of co-operation follows.

Subsection 1.—Consumers' Co-operation.

The co-operative store was first introduced into Canada by miners who had had experience of co-operation in Great Britain. The first co-operative store was opened at Stellarton, N.S., in 1861, and continued to do business until 1916. Many similar ventures were afterwards commenced, but a considerable number failed through their neglect to build up adequate reserve funds. In 1909 the Co-operative Union of Canada was formed, with six affiliated societies and 1,595 members; since October, 1909, it has published a monthly, *The Canadian Co-operator*, from which the following statistics (Table **25**) showing the growth of consumers' co-operation in the societies affiliated with the Co-operative Union have been taken.[2]

25.—Statistics of Co-operative Societies Affiliated with the Co-operative Union of Canada, 1909-31.

NOTE.—No data for the year 1916.

Year.	Societies.	Members	Share and Loan Capital.	Reserve Funds.	Stock in Trade.	Other Assets.	Sales.	Net Profits.	Purchase Dividends Paid.
	No.	No.	$	$	$	$	$	$	$
1909....	6	1,595	38,460	11,090	53,820	40,882	347,064	–	22,828
1910....	9	2,605	97,965	19,994	123,946	85,572	569,311	36,596	28,235
1911....	12	3,788	143,781	25,070	168,895	102,903	789,292	44,535	47,338
1912....	17	5,000	178,126	31,806	191,122	172,658	1,194,065	88,782	67,256
1913....	17	5,822	166,051	42,498	205,300	183,220	1,424,985	78,399	63,442
1914....	14	5,810	166,307	36,219	181,867	129,022	1,133,081	73,490	63,881
1915....	8	3,239	143,319	21,118	94,672	109,911	657,006	53,270	47,995
1917....	13	4,673	248,253	27,941	205,899	145,732	1,264,247	91,079	82,287
1918....	12	4,746	301,368	38,257	252,921	169,545	1,488,541	123,363	115,969
1919....	15	6,306	360,834	47,463	370,676	205,222	2,132,726	156,870	138,216
1920....	20	7,427	394,471	40,419	368,090	206,625	1,465,253	165,904	157,424
1921....	14	5,919	374,996	39,001	280,968	243,397	1,190,765	154,713	144,512
1922....	12	6,552	450,996	94,781	251,855	286,223	2,166,196	157,321	138,762
1923....	7	4,646	381,656	97,591	232,294	286,847	2,249,380	172,972	140,991
1924....	14	7,047	516,909	94,856	271,713	445,071	2,675,852	212,493	183,986
1925....	16	7,308	512,808	151,791	351,732	484,042	2,792,872	158,140	118,945
1926....	20	7,804	616,431	208,449	426,937	660,930	3,358,162	230,535	165,062
1927....	24	8,914	673,827	228,504	554,101	778,508	4,481,574	283,777	227,733
1928....	33	74,836	3,905,813	2,523,646	1,103,323	13,305,918	8,147,967	1,057,581	252,976
1929....	41	10,648[1]	769,755	484,864	663,476	1,006,628	5,030,560	238,302	238,302
1930....	38	10,462	693,561	362,127	617,538	1,124,572	4,826,642	243,884	195,178
1931....	37	8,404	595,617	460,798	461,022	1,069,167	3,667,240	193,348	151,435

[1] The decrease in membership is accounted for by the withdrawal of the United Farmers of Canada, Saskatchewan Section, Ltd., and the United Grain Growers, Ltd., the non-inclusion of the latter society being also mainly responsible for the decreases in the figures shown in the remaining columns.

The progress shown by the returns from the societies affiliated with the Co-operative Union does not represent the whole growth of the consumers' co-operative movement in Canada. Although the societies affiliated with the Co-operative Union are among the oldest and best established, there is a larger number of consumers' co-operative societies outside the Union than within it, the great majority of these being in the western provinces. In 1926, the Manitoba Co-operative League was organized to link up the co-operative societies in that province, and a similar organization was formed in Alberta in 1923. In Saskatchewan a conference of representatives of co-operative societies has been held annually since 1923.

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[1] The article referred to above was prepared for the Year Book by Miss Margaret Mackintosh, M.A., of the Department of Labour, Ottawa.

[2] For details regarding the Co-operative Union of Canada and its activities, see the 1925 Year Book, pp. 708-709.

The following table shows the number of co-operative societies in the Dominion, provincially arranged by groups, together with their respective memberships:—

26.—Number and Membership of Co-operative Associations in Canada, by Provinces and Types, 1932.

NOTE.—The figures for the Co-operative Union of Canada, which has 37 affiliated societies and a total membership of 8,404, have been included in the respective groups to which they belong.

Province.	Productive.	Marketing.	Productive and Marketing.	Distributive.	Marketing and Distributive.	Credit and Savings.	Community Hall Societies.	Miscellaneous.	Total.
				NUMBER OF ASSOCIATIONS.					
Interprovincial	–	21	–	–	1	–	–	–	22
Prince Edward Island	–	1	1	–	–	–	–	–	2
Nova Scotia	1	30	1	10	5	–	–	1	48
New Brunswick	6	16	1	14	–	–	–	5	42
Quebec	26	86	19	1	6	6	–	18	162
Ontario	3	46	13	39	24	3	–	8	136
Manitoba	2	60	1	67	–	–	4	9	143
Saskatchewan	4	5	2	179	2	–	63	68	323
Alberta	7	28	2	44	5	4	–	12	102
British Columbia	30	40	14	28	9	–	2	29	152
Totals	**79**	**333**	**54**	**382**	**52**	**13**	**69**	**150**	**1,132**
				REPORTED MEMBERSHIP.					
Interprovincial	–	238,458	–	–	30,000	–	–	–	268,458
Prince Edward Island	–	4,500	3,500	–	–	–	–	–	8,000
Nova Scotia	12	933	94	5,798	404	–	–	28	7,269
New Brunswick	659	229	43	7,311	–	–	–	1,802	10,044
Quebec	13,754	6,413	974	101	321	41,000	–	872	63,435
Ontario	123	6,147	2,943	4,331	23,125	1,693	–	945	39,307
Manitoba	30	42,977	29	3,859	–	–	268	265	47,428
Saskatchewan	37,015	25,675	1,925	40,185	264	–	3,891	153,242	262,197
Alberta	3,876	10,161	1,940	5,926	2,454	143	–	441	24,941
British Columbia	3,414	9,391	2,860	2,711	5,719	–	36	1,210	25,341
Totals	**58,883**	**344,884**	**14,308**	**70,222**	**62,287**	**42,836**	**4,195**	**158,805**	**756,420**

Subsection 2.—Co-operative Credit in Quebec.

A form of co-operation which has achieved great success is that which provides short-term credit for small farmers and industrial workers in the province of Quebec. In 1900, what are known as "Les Caisses Populaires", or People's Banks, were begun with the establishment, by the late Alphonse Desjardins, of La Caisse Populaire at Lévis. M. Desjardins adopted the principles of lending money only for approved purposes to carefully selected members in a restricted area, of limited liability, of withdrawable shares of small amount payable by instalments, and of distribution of profits. These banks are for the most part established in agricultural districts. Loans are made to purchase agricultural implements at cash prices, to increase farm live stock, to improve farm buildings, to tide over a period of depression, to pay off a merchant and for various similar purposes. The loans, though comprised within the term "short credit", are for longer periods than are usual in ordinary commercial transactions because agricultural operations necessarily extend over longer periods than those of trade. They may be for 12, 15, or even 24 months, because they must give time for the farmer to realize on his products.

At present these banks are organized under the Quebec Syndicates Act, 1906. The value of the shares is generally $5, which may be paid in instalments. The liability of the shareholders is limited to the value of their shares, which generally does not exceed $2,000 per shareholder. Shareholders and borrowers must reside within the area of the bank's field of operations, except that under the by-laws shareholders who remove from the locality may continue their holdings in the bank but without participation in the management by holding office. Larger loans are made upon mortgage and the smaller ones upon notes, but interest and a portion of the loan capital must be repaid at fixed periods in such a way as to extinguish the debt within a determinate time. Each bank is administered by a board of from five to nine members. A credit committee of at least three members passes on the loans requested by shareholders, and a board of supervision of three members checks loans and value of securities, and audits the accounts. The members of these boards give their services gratuitously.

The following table (Table **27**) exhibits the progress of the banks during the seventeen years 1915 to 1931. The table is compiled from statistics included in successive volumes of the Quebec Year Book.

27.—Progress of Co-operative People's Banks in Quebec, 1915-31.

Year.	Banks Reporting.	Members.	Depositors	Borrowers.	Loans Granted.	Value of Loans Granted.	Profits Realized.
	No.	No.	No.	No.	No.	$	$
1915	91	23,614	13,696	6,728	8,983	1,483,160	89,893
1916	94	25,028	15,613	6,696	11,201	1,641,258	100,945
1917	93	25,669	18,977	7,458	12,741	2,306,172	148,591
1918	98	27,593	20,672	8,056	14,293	2,623,096	180,039
1919	100	29,795	23,451	9,148	14,386	3,667,004	238,375
1920	113	31,752	26,238	9,213	15,390	4,241,544	311,323
1921	100	31,029	30,570	9,219	14,983	1,248,725	352,940
1922	108	33,166	30,583	8,999	13,367	2,891,092	334,396
1923	111	32,173	29,771	8,373	12,273	3,429,444	354,804
1924	119	31,250	30,874	8,414	11,017	3,763,852	398,976
1925	122	33,279	33,527	9,384	13,682	3,909,790	449,531
1926	154	36,298	37,343	10,418	15,843	4,496,956	468,034
1927	159	41,365	40,753	11,754	16,832	4,778,761	537,294
1928	168	41,374	40,568	11,885	17,403	5,047,769	571,664
1929	178	44,835	44,685	13,553	17,994	4,249,650	645,616
1930	179	45,767	44,940	14,278	18,857	3,724,537	645,096
1931	174	43,641	43,207	13,240	16,203	2,998,046	594,235

Subsection 3.—Producers' Co-operation.[1]

The chief co-operative organizations of producers in Canada, as was clearly shown in the article on co-operation published in the 1925 edition of the Year Book, are still engaged in agricultural operations, including the grain growers of the prairies, the dairy farmers of Ontario and Quebec, and the fruit and vegetable growers of Nova Scotia, Ontario and British Columbia. The largest co-operative organizations in Canada are found among the grain growers of the Prairie Provinces.

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[1] See also pp. 712-720 of the 1925 Year Book, and pp. 711-713 of the 1926 Year Book, pp. 786-787 of the 1931 Year Book, and pp. 666-667 of the 1932 Year Book.

Agricultural Co-operation in Canada.[1]—Co-operative organization forms an integral part of the economic fabric of Canadian agriculture and is practised extensively in every province in the Dominion. In size, the co-operatives range from local associations with a limited sphere of operation to large organizations of national importance. The smaller co-operatives generally function in connection with community affairs or in the purchasing of supplies, while the larger co-operatives are generally interested in the distributive trades, processing or purchasing or combining these functions.

The largest co-operatives are found in Western Canada and function in the distribution of farm products. In the Prairie Provinces are large co-operative elevator companies with a total membership of about 150,000, handling a large share of the western wheat crop. These organizations, Manitoba Pool Elevators Ltd., Saskatchewan Pool Elevators Ltd., and Alberta Pool Elevators Ltd., were formerly part of the wheat pool organization but during the past two years have operated independently as co-operative grain handling concerns. These organizations operate on the patronage dividend basis. In addition, the United Grain Growers Ltd., is a joint stock company, operating in the Prairie Provinces and largely owned by farmers.

In the live-stock industry the largest farmer-owned organization is the Canadian Live Stock Co-operative Ltd., with a membership of about 10,000. This company is in affiliation with interests in Eastern Canada and comprises about 324 local associations. The United Farmers' Co-operative Co. Ltd., of Ontario and the Quebec Federated Co-operative are also affiliated for the purpose of marketing live stock.

In the wool trade, co-operative effort is represented by the Canadian Co-operative Wool Growers, with affiliated organizations in eight provinces. This co-operative engages in the storing, grading and marketing of wool and allied products.

There are 113 co-operatives engaged in processing, manufacturing and marketing dairy products in Canada. The largest of these co-operatives is the Saskatchewan Co-operative Creameries with a membership of 39,000. Manitoba Co-operative Dairies and the Alberta Milk Pool are large organizations in this field each with a membership of over 6,000.

The Canadian Poultry Pool operates largely in Western Canada but has affiliated organizations in Eastern Canada. The Pool has a combined membership of about 26,000.

In addition to the foregoing co-operative organizations many other co-operative organizations are engaged in handling farm products or in co-operative purchasing. Among these may be mentioned the Ontario Farmers' Co-operative Co. Ltd., which operates creameries, handles live stock, field crops and engages in purchasing for its members. In addition there are co-operative organizations throughout Canada engaged in the marketing of fruit, potatoes, honey and other farm products. Space will not permit a thorough canvass of co-operative effort throughout Canada, but this brief outline will serve to show the important place which co-operation occupies in the agricultural industry of Canada.

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[1] Prepared under the direction of Dr. T. W. Grindley, Chief of the Agricultural Branch, Dominion Bureau of Statistics.

Section 12.—Labour Legislation in Canada.

A summary of Dominion and provincial labour laws in force at the end of 1928 was given in the Canada Year Book for 1929 at pp. 755–762, together with a note on the division of legislative jurisdiction as between the Dominion and the provinces. Summaries of legislation enacted in 1929, 1930 and 1931, were published in the Year Book for those years.

Labour laws enacted during 1932 by the Parliament of Canada and the Legislatures of the several provinces are contained in the Report on Labour Legislation in Canada, 1932, issued by the Department of Labour. The principal enactments of that year are summarized below.

Dominion Labour Legislation.—The Relief Act, 1932, authorizes the Governor in Council to enter into agreements with the provinces respecting relief measures and to pay out of the Consolidated Revenue Fund the sums necessary to meet obligations created by such agreements; to provide for special relief and works in the National Parks and in the drought-stricken areas of Saskatchewan; to assist in defraying the cost of the sale and distribution of natural products; to make loans to, and guarantee repayment of, money loaned to provinces or public corporations and undertakings; and generally to assist the provinces in the relief of distress.

The Unfair Competition Act, repealing those sections of the Trade Mark and Design Act which relate to trade marks, enacts provisions for the protection of trade marks, including trade union labels, in accordance with the Hague Convention of 1925.

Provincial Labour Legislation.—In Ontario and Quebec legislation was adopted making the Dominion Industrial Disputes Investigation Act applicable to disputes which are within the legislative jurisdiction of those provinces.

In Saskatchewan a number of amendments were made to the Mines Act, including a change of title to "The Coal Mines Safety and Welfare Act". A workman may not be employed above or below ground for more than eight hours per day except by mutual consent of employer and employee. Exception is made of employees in an office, boarding house or bunk house, in cases of emergency, at the weekly change of shift, and where continuous or technical work must be performed. The Minister may suspend the operation of those provisions in certain cases. Wages must be paid twice a month. An employee may authorize deductions for hospital dues, medical service or sickness fund by written order.

Certain sections of the Ontario Factory Shop and Office Building Act were made applicable to bake-shops and restaurants, including those regulating hours of labour, forbidding the employment of children under 14 years of age and of children under 16 years except on a school certificate, prescribing safety measures in connection with elevators and hoists, and forbidding the keeping of premises so as to endanger health or safety. Other changes in the Act were designed to bring such places as bowling alleys and shoe-shine parlours within its scope and to give better control of child labour in lumber yards, etc. The inspector may grant a permit for the operation of a factory by a double shift. In such cases hours of labour may not exceed eight for each shift nor sixteen for both shifts and the double shift must fall between the hours of 6 a.m. and 11 p.m. Women and young persons must be allowed at least one hour in each shift for a meal. The section permitting women and young persons to be employed in shops up to 10 p.m. on Saturday, the day before a statutory holiday, and from Dec. 14 to 24, was amended to limit their hours of work to 10 per day and 60 per week. The section providing for inspection of houses where articles of clothing, etc., are being made under contract was extended to make similar provision for the manufacture of any household article. The Lieutenant-Governor in Council is authorized to make Regulations for the protection of workers in contact with benzol or other industrial poison.

In Prince Edward Island, the Electrical Inspection Act provides for the inspection and regulation of electrical installations.

By an amendment to the Shops Regulation Act of British Columbia, the working hours of children under 16 in shops were limited to 8 per day and 48 per week.

Sections added to the Highway Traffic Act of Manitoba empowered the Municipal and Public Utility Board to regulate the hours and rates of wages of employees of persons operating public service vehicles.

The Ontario Public Commercial Vehicle Act was amended to authorize the Lieutenant-Governor in Council to regulate hours of labour for drivers of such vehicles.

The scope of the Quebec Minimum Wage for Women Act was extended to include commercial establishments. Two members of the Minimum Wage Commission are to represent the female employees. The Commission was authorized to fix a special scale of wages for seasonal workers.

The Ontario Minimum Wage Act was amended to require employers to keep records of the names, addresses, rates of wages, hours of labour, actual earnings and actual time spent in work of all female employees, together with the ages of those under 18 years of age.

An amendment to the Alberta Child Welfare Act widened the term "neglected child" to include any girl, any boy under 12, or any boy between the ages of 12 and 14 who engages in any street trade unless he has the consent of his parent or guardian.

The Ontario Apprenticeship Act was amended to provide for an Apprenticeship Board of three members, in place of the tripartite committee established by the principal Act, and for the appointment of inspectors in addition to the Chief Inspector. The Board was authorized to make inquiries as to the opinions of employers and employees in the designated trades with regard to suggested changes in the Act and Regulations, and no changes may be made without written notice to the employers and employees concerned.

The New Brunswick Workmen's Compensation Act was revised and amended following the report of a commission appointed in 1931 to inquire into its operation. Clerical workers were brought within the scope of the Act. A clause was added which provides that where the accident arises out of employment, unless the contrary is shown, it shall be presumed to have occurred in the course of employment and *vice versa*. When a workman is engaged on work that is performed both within and without the province, the employer must include the workman on his pay roll submitted to the Board and notify the Board that he will be so engaged. Should the employer fail to do so, he is individually liable for compensation unless it can be claimed under the laws of the place where the accident happened. Application for compensation must now be made within six months, instead of one year, after the accident or within six months of death. "Medical aid" was extended to include artificial members and apparatus. The Board was authorized to expend up to $15,000 per annum in order to rehabilitate injured workmen.

The Workmen's Compensation Acts of Alberta and Ontario were also amended following the reports of special bodies appointed to inquire into their operation. In Alberta the Workmen's Compensation Board was authorized to enter into agreements with the boards of other provinces to provide for compensation to workmen employed partly in Alberta and partly in another province. In the case of dependants or a workman suffering from permanent partial disability who wishes to reside outside Canada, the Board may, in lieu of commuting at the capitalized value of the payments, award such lesser sum as will in its opinion permit the same degree of comfort as full compensation in Alberta. Restaurants and retail shops were added to the establishments covered by the Act.

Changes in the Ontario Workmen's Compensation Act included the stipulation that in case of injuries to a minor unlawfully employed, the unlawful employment shall not affect the right of the claimant, and the employer may be made individually liable for the payment of compensation. Dental treatment was included in "medical aid". The following were added to the schedule of industrial diseases: infected blisters, bursitis, dermatitis and cancer arising from the manufacture of pitch and tar.

In all provinces except Prince Edward Island, legislation was enacted enabling those provinces to take advantage of the Unemployment and Farm Relief Act passed by the Parliament of Canada during the 1931 session. The Quebec Legislature enacted a law providing that the wages of workmen employed on unemployment relief works carried on under certain Dominion and Provincial Statutes should not be seizable for debt.

A Nova Scotia Act provided for the settlement of unemployed coal miners on farms. In Quebec an Act was also passed to promote land settlement.

The Employment Bureau Act of Quebec was amended to provide for the abolition of private fee-charging employment bureaus.

In Nova Scotia an Act was passed to provide for a Department of Labour.

A section added to the Ontario Department of Labour Act empowers an inspector employed by the Department to order immediate cessation of any work to which any Act administered by the Department applies and which he considers dangerous to life or property.

In Ontario and Manitoba the laws providing for old age pensions were amended to enable those provinces to take advantage of the 1931 amendment to the Dominion Act, which increased the amount of the Dominion contribution from 50 to 75 p.c. of provincial disbursements.

Section 13.—Legislation Respecting Combinations in Restraint of Trade.

A general article on Canadian legislation concerning trade combinations and monopolies against the public interest will be found at pp. 765-770 of the 1927-28 Year Book under the heading "Legislation respecting Combinations in Restraint of Trade". The article outlines the provisions of the Combines Investigation Act and reviews the principal cases dealt with under the Act up to Mar. 31, 1927. A brief statement of the provisions against combines as contained in the Criminal Code,[1] the Customs Tariff,[2] the Excise Act[3] and the Patent Act[4] is included. A further section of the article summarizes former Canadian legislation for the investigation of combines, including the Combines Investigation Act of 1910 and the Combines and Fair Prices Act of 1919.

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[1] R.S.C., 1927, c. 146, ss. 496-498.
[2] R.S.C., 1927, c. 44, s. 15.
[3] R.S.C., 1927, c. 60, s. 27.
[4] R.S.C., 1927, c. 150, s. 40.

The Combines Investigation Act.—The Combines Investigation Act (R.S.C., 1927, c. 26) is designed, as its full title indicates, "to provide for the investigation of combines, monopolies, trusts and mergers", and declares to be unlawful only such combines as "have operated or are likely to operate to the detriment or against the interest of the public, whether consumers, producers or others". The Statute provides that an inquiry shall be made by the Registrar on receipt of an application signed by any six British subjects resident in Canada, or if the Registrar has reason to believe that a combine exists, or if the Minister of Labour so directs. If after preliminary inquiry sufficient evidence is disclosed to justify further investigation, this may be conducted by the Registrar or by a special Commissioner appointed by the Governor in Council. Full authority is given the Registrar and the Commissioner to examine witnesses on oath and compel the production of records and documents.

The remedies provided by the Act are those of publicity and penalty. The proceedings are conducted in private, unless otherwise ordered by the Minister, but the report of any Commissioner is required to be published within fifteen days of its receipt by the Minister. Whenever in the opinion of the Minister an offence has been committed, he may remit the report and the evidence to the Attorney-General of the province concerned. The penalty section of the Statute provides that any person who is a party or privy to, or knowingly assists in, the formation or operation of a combine is guilty of an indictable offence and liable to a penalty not exceeding $10,000 or to two years' imprisonment, or, if a corporation, to a fine not exceeding $25,000. Provision is also made in the Act for the reduction or removal of the customs duty on any article of commerce, among the manufacturers or dealers in which there exists a combine, the operation of which is facilitated by the tariff. Similarly, the Exchequer Court may revoke a patent if there is evidence to show that the holder of such patent has made use of his exclusive rights to limit production or competition unduly, to enhance prices unreasonably, or to restrain or injure trade.

The constitutional validity of the Combines Investigation Act was given final confirmation by the Judicial Committee of the Privy Council in a decision delivered in January, 1931. This judgment confirmed the unanimous decision of the Supreme Court of Canada, given in April, 1929, after a reference for determination of this question had been made to the Courts by the Dominion Government. Both courts upheld also the constitutional validity of Section 498 of the Criminal Code, relating to combinations in restraint of trade.

Combine Cases in 1932.—An investigation under the Combines Investigation Act into an alleged combine of manufacturers of fruit baskets and other containers for fresh fruits and vegetables was completed by the Registrar early in 1932, following charges of price agreements among Ontario basket manufacturers. The report of the investigation was not published and was referred to the Attorney-General for Ontario, who issued instructions for prosecution, but the case had not reached the courts at the end of 1932. An alleged combine of manufacturers of radio tubes was investigated by the Registrar. The application alleged the fixing of common selling prices at unreasonably high levels and a detrimental lessening of competition. The report was not published and was remitted to the Attorney-General for Ontario. No court proceedings were taken. An inquiry into an alleged combine in the importation and distribution of Welsh and Scotch anthracite coal was instituted in November, 1932, and hearings were held in Montreal and Quebec in December and January. An investigation into an alleged combine of buyers of Ontario-grown tobacco was also in progress at the end of 1932. No Commissioners were appointed under the Act during the year.

Prosecution of fifteen companies and three individuals engaged in the motion picture industry in Canada, on charges laid under the Combines Investigation Act and Section 498 of the Criminal Code, resulted in the acquittal of all of the accused. The trial followed an investigation in 1931 by Mr. Peter White, K.C., as a Commissioner under the Combines Investigation Act. The prosecution was conducted under the Attorney-General for Ontario. The judgment of the Court, delivered by Mr. Justice Garrow in March, 1932, held that the prosecution had failed to prove the existence of agreement among the accused to lessen competition in, or substantially control the supply of, motion picture films in Ontario. An appeal by the members of the Electrical Estimators' Association, a combine of electrical contractors in the city of Toronto, against their conviction by Mr. Justice Raney in January, 1932, following an investigation under the Combines Investigation Act, was dismissed in the Appellate Division of the Supreme Court of Ontario in October, 1932. Members of fifteen firms paid fines totalling $26,200.

The annual report of the Registrar of the Combines Investigation Act, dealing at greater length with the above subjects and referring also to other inquiries, is published as a section of the Annual Report of the Department of Labour.

PART II.—WAGES AND COST OF LIVING.

Section 1.—Wage Rates.[1]

Statistics of rates of wages and hours of labour have been collected for recent years by the Dominion Department of Labour, and are published in a series of bulletins supplementary to the *Labour Gazette*. Report No. 1 of this series was issued in March, 1921. The records upon which the statistics are based begin in most cases with the year 1901. Index numbers have been calculated to show the general movement of wage rates; the series covers 21 classes of labour back to 1901, 4 classes of coal miners back to 1900, and common factory labour, miscellaneous factory trades and lumbering back to 1911. The index numbers are based upon wage rates in 1913 as 100.

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[1] See pp. 774-783 of the 1927-28 Year Book for an article on the "Wages Statistics of the Census of 1921".

The accompanying table of index numbers (Table 1) shows the relative changes from year to year. A downward movement appeared in most of the groups in 1921 and 1922, after the peak had been reached in 1920. The index numbers for 1923 and 1924 showed on the whole a slightly upward trend, but while there were slight increases during 1925 in some groups, a substantial decline in coal miners' wages reduced the average. In 1926 slight increases took place in the wages paid by the building, metal and printing trades, electric railways and steam railways. In 1927 general increases took place in all the six groups included in the average, as well as in the other three groups; wage increases in the building trades and on the steam railways were the outstanding features of the year. In 1928, except steam railways which was stationary and common factory labour which declined fractionally, all groups showed an upward movement, a substantial increase appearing in building trades. In 1929 all groups except coal mining were higher, the building trades showing the greatest increase. In 1930 building trades showed a substantial increase, lumbering a decrease and other groups fractional increases. In 1931 all groups were down except printing which showed a slight advance and coal mining which was unchanged. In 1932 all groups were down, the decreases being greatest in lumbering, building trades and steam railways.

Rates of wages and hours of labour in 1932 in various trades in the largest cities of the five economic areas of Canada, will be found in Table 2. The attention of those specially interested in the subject of wages and hours is directed to the valuable detailed study, "Wages and Hours of Labour in Canada, 1930, 1931 and 1932", published by the Department of Labour as a supplement to the *Labour Gazette*, January, 1933.

1.—Index Numbers of Rates of Wages for Various Classes of Labour in Canada, 1913-32.

(Rates of Wages in 1913=100. Index numbers for 1901-12 were given at p. 674 of the 1932 Year Book.)

Year.	Average.[1]	Building Trades.	Metal Trades.	Printing Trades.	Electric Railways.	Steam Railways.	Coal Mining.	Common Factory Labour.	Miscellaneous Factory Trades.	Logging and Sawmilling.
1913	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1914	101·3	100·8	100·5	102·4	101·0	101·4	101·9	101·0	103·2	94·7
1915	101·4	101·5	101·5	103·6	97·8	101·7	102·3	101·0	106·2	89·1
1916	105·8	102·4	106·9	105·8	102·2	105·9	111·7	110·4	115·1	109·5
1917	119·9	109·9	128·0	111·3	114·6	124·6	130·8	129·2	128·0	130·2
1918	143·6	125·9	155·2	123·7	142·9	158·0	157·8	152·3	146·8	150·5
1919	165·3	148·2	180·1	145·9	163·3	183·9	170·5	180·2	180·2	169·8
1920	197·8	180·9	209·4	184·0	194·2	221·0	197·7	215·3	216·8	202·7
1921	191·2	170·5	186·8	193·3	192·1	195·9	208·3	190·6	202·0	152·6
1922	182·4	162·5	173·7	192·3	184·4	184·4	197·8	183·0	189·1	158·7
1923	183·3	166·4	174·0	188·9	186·2	186·4	197·8	181·7	196·1	170·4
1924	183·7	169·7	175·5	191·9	186·4	186·4	192·4	183·2	197·6	183·1
1925	179·7	170·4	175·4	192·8	187·8	186·4	167·6	186·3	195·5	178·7
1926	180·5	172·1	177·4	193·3	188·4	186·4	167·4	187·3	196·7	180·8
1927	184·3	179·3	178·1	195·0	189·9	198·4	167·9	187·7	199·4	182·8
1928	187·6	185·6	180·1	198·3	194·1	198·4	168·9	187·1	200·9	184·3
1929	192·7	197·5	184·6	202·3	198·6	204·3	168·9	187·8	202·1	185·6
1930	194·4	203·2	186·6	203·3	199·4	204·3	169·4	188·2	202·3	183·9
1931	190·8	195·7	182·9	205·1	192·4[1]	199·2	169·4	183·4	197·3	163·0
1932	179·3	178·2	174·7	194·2	180·7[1]	183·9	164·0	173·6	184·3	141·3

[1] Revised figures: for 1931 and 1932 the percentage changes in daily wages instead of hourly wages have been used for electric railways.

2.—Rates of Wages and Hours of Labour in Various Trades,[1] and of Unskilled Factory Labour in Certain Cities of Canada, 1932.

NOTE.—Corresponding figures for 1920–26 will be found at pp. 720-721 of the 1926 Year Book and for later years in subsequent issues.

Occupation.	Halifax.		Montreal.		Toronto.		Winnipeg.		Vancouver.	
	Wages per hour.	Hours per week.	Wages per hour.	Hours per week.	Wages per hour.	Hours per week.	Wages per hour.	Hours per week.	Wages per hour.	Hours per week.
1. Building Trades—	$		$		$		$		$	
Bricklayers	·97½	44	·75	44	1·00	40	1·35	44	1·22½	40
Carpenters	·67½	44	·60	44–55	·90	40	1·00	44	·87½	40–44
Electrical workers	·85	44	·75	44	1·00	40	1·00	44	1·00	44
Painters	·67½	44	·65	44–49½	·75–·82½	44	·70–·80	44	·75	44
Plasterers	·85	44	·85	44–49½	1·00	40	1·35	44	1·00-1·25	40
Plumbers	·85	44	·75	44	1·00	40	1·15	44	1·00	40
Sheet metal workers	·75	44	·65	44	·90	40	·85	44	1·00	40–44
Stonecutters	·90	44	·75–1·00	44	1·00	40	1·15	44	1·25	40
Labourers	·35–·40	44–48	·30–·40	44–60	·30–·50	40–48	·40–·50	44–60	·40–·50	40–44
2. Electric Railways—										
Conductors and motormen[2]	·61	60	·55	70[3]	·60	40–48	·58	42	·63	48
Linemen	·55–·77	44	·51–·55	40	·72–·78	36	·86	44	·69–·97	32
Shop and barn men	·51–·77	44–56	·38–·62	45–62	·54–·81	33	·40–·70	39–44	·46–·75	44–48
Electricians	·72–·77	44	·55–·65	40–45	·60–·79	32–33	·57–·70	39–42	·70–·75	44
Trackmen and labourers	·40–·50	44	·35	48	·50–·59	32	·40½	44	·50–·59	44–48
3. Printing Trades—	Wages per week.		Wages per week.		Wages per week.		Wages per week.		Wages per week.	
Compositors, machine and hand, news	35·00	48	38.00-44.00	48	47·50	46½	43·00	46	43.20	45
Compositors, machine and hand, job	35 00	44	32.40-48.00	44–48	35.00-40.00	44-48	39.60	44–48	40.50	44–48
Pressmen, news	34·00	48	35.00-40.00	48	46.50	48	42.00	48	43·20	48
Pressmen, job	31 00	44–48	32.00-36.00	44–48	33.00-40.00	44–48	39 60	44–48	40 50	44–48
Bookbinders	30.00-40.00	44–48	30.00-33.75	48	33.00-38.00	44 48	35.00-39.00	44–48	38.56-40.50	44–48
Bindery girls	11 00	44–48	12.50-15.00	48	15.00-18.00	44–48	10.00-18.00	44–48	16.00-20.25	44–48
	Wages per hour.		Wages per hour.		Wages per hour.		Wages per hour.		Wages per hour.	
4. Unskilled Factory Labour	·31½–·34	48–50	·20–·35	44–60	·36–·44	25½–54	·30–·42½	27–50	·22½–·47½	44–48

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[1] For statistics of the wages and hours of employees of steam railways and wages of employees in and about coal mines in Canada, see pp. 751-752 of the 1930 Year Book where the rates, etc., for the past seven or eight years, to 1929, are given. Except for a ten p.c. reduction in Nova Scotia in coal mines in 1932, these rates were unchanged down to December, 1932. In previous editions of the Year Book a table showing the wages and hours of common labour in factories for certain cities has also been given in this section. This has been omitted this year to conserve space, but the information can be found at p. 35 of "Wages and Hours of Labour in Canada", published as a supplement to the *Labour Gazette* for January, 1933. For the five cities of Table 2 it is included under sub-heading 4 of the stub.
[2] Final maximum rate after annual increase. [3] One day off if possible.

Section 2.—Wages and Hours of Labour Under Minimum Wage Boards in Canada.

Seven provinces have in effect legislation providing for minimum rates of wages for female employees in certain industries, and also have certain restrictions of hours. In British Columbia similar legislation applies to males, both as to wages and hours. In Alberta the legislation applies to males in certain respects. Such legislation was first enacted in these provinces as follows: British Columbia and Manitoba in 1918; Saskatchewan and Quebec in 1919; Alberta, Nova Scotia and Ontario in 1920. The British Columbia legislation as to wages for adult males was enacted in 1925 but that as to hours in 1923. In each province these statutes became effective through orders issued and administered by Boards. A Board was established in Quebec in 1926. In Nova Scotia a Board was appointed in 1930. In New Brunswick an Act was passed in 1930 to come into force on proclamation but it has not yet been proclaimed.

3.—Minimum Wages and Maximum Hours of Labour for Female

Industry or Occupation.	Alberta.				British Columbia (k).				Manitoba (a).			
	Wages per week.		Hours.		Wages per week.		Hours.		Wages per week.		Hours.	
	Adults, experienced.	Minors, learners, etc.	per day	per wk.	Adults, experienced.	Minors, learners, etc.	per day	per wk.	Adults, experienced.	Minors, learners, etc.	per day	per wk.
	$	$			$	$			$	$		
Factories	† 12.50	6.00–10.00	9	48	14.00	7.00–13.00	8	48	11.00–12.00	8.00–11.00	9	48-50
Dressmaking	† 12.50	(g)6.00–10.00	9	48	14.00	7.00–13.00	8	48	(h)12.00	(g)6.00–11.00	(m) 8½	50
Millinery	† 12.50	(g)4.00–10.00	9	48	14.00	7.00–13.00	8	48	12.00	(u)5.00–10.00	(m) 8½	50
Tailoring	† 12.50	(g)6.00–10.00	9	48	14.00	7.00–13.00	8	48	12.00	6.00–11.00	9	50
Fur-sewing	† 12.50	(g)6.00 10.00	9	48	14.00	7.00–13.00	8	48	(h)12.00	8.00–10.50	9	48
Fruit and vegetable canning, etc	12.50	9.00–10.00	9	48	‡14.40	‡ 11.00	10	48	11.00–12.00	8.00–11.00	9	48-50
Printing, etc	† 12.50	7.00–11.00	9	48	14.00	7.00–13.00	8	48	12.00	8.00–11.00	9	48
Laundries, etc	† 12.50	9.50–11.50	9	48	13.50	8.00–12.00	–	48	(h)12.00	9.00–11.00	9	50
Retail stores	12.50	7.50–11.00	9–(m)	52	12.75	7.50–12.00	–	48	12.00	7.00–11.00	(m) 9	48
Hotels, restaurants, etc.	† 12.50–14.50	9.00–13.00	9	48–56	14.00	12.00	–	48	12.50	–	10	48
Theatres, amusement places, etc	(p)14.00	–	9	48	(p)14.25	–	–	48	(h)12.00	–	9	48
Personal service, hair-dressing, etc	† (p)14.00	(g)6.00–12.00	9	48	(p)14.25	10 00–13.00	–	48	12.00	(g)8.00–11.00	(m) 10	48
Offices and clerical work	† 14.00	(g)7.50-12.00	9	48	15.00	11.00–14.00	–	48	(h)12.50	8.00–11.50	8	44
Telephone and telegraph	†z14.00	(g)7.50–12.00	9	48	15.00	11.00–13.00	8	48	–	–	–	–
Elevator operators	14.00	(g)6.00–12.00	9	48	14.00	12.00	–	48	–	–	–	–

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*Cities and towns only.

†Applicable to certain cities and towns only.

‡Ten per cent lower, June 15 to Nov. 15, 1932.

**Rates for most classes reduced by 10 p.c. for experienced adults and 5 p.c. for those with one year's experience, June, 1932 to April 1, 1933.

(a) In Manitoba, in brickyards and in seasonal and casual employment in industries not otherwise covered, a minimum wage of $12 per week or 30 cents per hour is established.

(b) For Ontario the ranges of rates shown for experienced adults cover the various rates set for localities according to population. In 1932 a minimum wage rate of $12.50 per week, 50 hours maximum, was set for Toronto.

(c) Seasonal canneries included under separate order: 18 to 60 years of age, 18 to 25 cents per hour, other ages, 15 to 20 cents.

(d) The Factory Act provides for maximum hours for female employees, 10 per day and 60 per week.

(e) Textile and knitting factories: $10.00-$12.00 for experienced adults, $6.00-$10.00 for minors and learners; boot and shoe and leather trades: $8.00-$12.50 for experienced adults, $5.00-$11.00 for minors and learners; various classes of clothing and tobacco factories: $9.00-$12.50 for experienced adults, $6.00-$11.00 for minors and learners; these rates to be paid for 44-55 hours per week in clothing factories and for 50-55 hours in tobacco factories, *pro rata* for additional hours.

(f) The Factory Act provides for maximum hours, for female employees, 10 per day and 55 per week.

(g) Probationary period without minimum rate.

(h) Winnipeg and vicinity only, and Brandon for fur-sewing and theatres, etc.

(j) In mail order houses and in retail stores in certain cities and towns.

(k) In the fishing industry a minimum rate of $15.50 per week (48 hours) or 32⁸⁄₂₄ cts. per hour is set for experienced workers (12 months); $12.75 to $14.75 under one year.

Subsection 1.—Minimum Wages for Females.

The above table gives summary figures of minimum rates of wages in force under these Boards at the end of 1932. Orders and amendments issued from time to time have appeared in summary form in the *Labour Gazette*, as issued. In some provinces these orders include Regulations as to employment

Employees under Orders of Minimum Wage Boards in Canada, 1932.

Nova Scotia.*				Ontario (b).				Quebec.				Saskatchewan†**			
Wages per week.		Hours.		Wages per week.		Hours.		Wages per week.		Hours.		Wages per week.		Hours.	
Adults, experienced.	Minors, learners. etc.	Per day	Per wk.	Adults, experienced.	Minors, learners, etc.	Per day	Per wk.	Adults, experienced.	Minors, learners, etc.	Per day	Per wk.	Adults, experienced.	Minors, learners, etc.	Per day	Per wk.
$	$			$	$			$	$			$	$		
10.00–11.00	6.00–10.00	–	(l)	(c)10.00–12.50	6.00–11.00	–	(d)	(e)8.00–12.50	(e) 5.00 11.00	–	(f)	14.00	7.50–11.50	–	48
10.00–11.00	6.00–10.00	–	(l)	(v)	–	–	–	9.00–12.50	6.00–11.00	–	44–55	(j) 15.00	(g)3.00–12.00	–	49–51
10.00–11.00	6.00–10.00	–	(l)	(r)10.00–12.50	(r)6.00–11.00	–	–	–	–	–	–	(j) 15.00	(g)3.00–12.00	–	49–51
10.00–11.00	6.00–10.00	–	(l)	(s)10.00–12.50	(g)6.00 (s) 11.00	–	–	9.00–12.50	6.00–11.00	–	44–55	(j) 15.00	(g)3.00–12.00	–	49–51
10.00–11.00	6.00–10.00	–	(l)	(v)	–	–	–	10.00–12.50	6.00–11.00	–	44–55	–	–	–	–
10.00–11.00	6.00–10.00	–	(l)	(e)10.00–12.50	6.00–10.00	–	(d)	–	–	–	–	14.00	7.50–11.50	–	–
10.00–11.00	6.00–10.00	–	(l)	10.00–12.50	6.00–10.00	–	(d)	9.00–12.50	6.00–11.00	–	(f)	14.00	7.50–11.50	–	48
10.00–11.00	6.00–10.00	–	(l)	11.00–12.50	7.00–11.00	–	(l)	9.00–12.00	7.00–10.50	–	–	14.00	9.50–11.50	–	48
–	–	–	–	8.00–12.50	6.00–11.00	–	(l)	–	–	–	–	(j) 15.00	7.00–13.50	–	49–51
10.00–11.00	8.00–10.00	–	(l)	10.00–12.50	–	–	(n)	–	–	–	–	(o)13.00–14.00	11.00–12.00	–	50–56
–	–	–	–	11.00–12.50	–	–	(q)	–	–	–	–	–	–	–	–
–	–	–	–	(s)12.00–12.50	6.00– (s)10.00	–	–	–	–	–	–	15.00	10.00–12.00	10	50
–	–	–	–	(w)8.00–12.50	(w)6.00–11.00	–	–	–	–	–	–	–	–	–	–
y9.00–11.00	y6.00–10.00	–	(l)	(t)7.00–12.50	5.00–11.00	–	–	–	–	–	–	–	–	–	–
–	–	–	–	8.00–12.50	–	–	–	–	–	–	–	–	–	–	–

(l) Rate applies to work between 44 and 50 hours per week, hours in excess of 50 to be paid at not less than a rate based on 50 hours per week; hours under 44 at a rate based on normal hours in establishment.

(m) Longer working time permitted on Saturdays, etc., and sometimes in certain months.

(n) Full minimum rate for 36 hours or longer up to 50 hours; for time under 36 hours and over 50 hours, 20 to 25 cents per hour, according to population; order applies only to localities of 4,000 and up.

(o) Kitchen help $11 per week of six days or $12 per week of seven days; 35 cents per hour.

(p) Including garages, gasolene service stations, shooting galleries, elevator service, etc.; in British Columbia, drivers of vehicles, ushers, cloak-room attendants, etc., special provision for broken and part time

(q) Full minimum rate for 40 hours or more worked; 25 to 30 cents per hour for work less than 40 hours.

(r) Custom millinery in localities of 4,000 population and up.

(s) Cities of 30,000 and up.

(t) Telephone only in localities of 4,000 and up and those having 200 or more telephone subscribers.

(u) Probationary period in departmental stores with minimum of $6 thereafter.

(v) In establishments classified as factories, covered by factory orders.

(w) Applies also to wholesale houses and warehouses.

(y) Telephone only.

(z) For telephone work and applies to private telephone exchanges in localities of 600 and over, and public exchanges having over 250 subscribers.

conditions, terms of employment, sanitary conditions, etc., and all provide for variations under licence from the Boards to permit lower rates of pay for handicapped employees, etc., and to meet special conditions.

In this table the figures for adult learners and for minors and apprentices are shown in a range covering both classes. There is considerable variation in the rates for such classes in the various industries and the time allowed for such periods varies considerably, from a few weeks to two years and upwards. The number of learners and apprentices is usually restricted to 25 p.c. of the employees.

The hours of labour shown in Table **3** are those for which the minimum rates are payable, or the maximum hours of work established by the Minimum Wage Boards or provided for under other legislation, particulars in some instances being given in the footnotes.

The information here given is intended to afford a statistical summary of the minimum wages and restricted hours of labour in the provinces and industries affected and, while some of the more significant details have been given in footnotes, it has been found impossible to include the information in such form as to indicate any more than the general conditions under these provisions.

In Alberta and British Columbia certain rates were reduced temporarily in 1932 as shown in footnotes to the table. In Alberta the rates in hotels and restaurants were reduced.

Subsection 2.—Minimum Wages for Male Employees.

In Alberta, a revision of the Factories Act in 1926 provided that in establishments governed by the Act, which include shops, hotels, restaurants, and office buildings, no male may be employed at a lower wage than the minimum rate for female employees in the same class of work except apprentices under indenture approved by the Commissioner of Labour, who is the Secretary of the Minimum Wage Board.

In British Columbia the orders issued under the Male Minimum Wage Act, 1925, having been declared invalid in October, 1928, by the Supreme Court of Canada (*Labour Gazette*, November, 1928, p. 1310), a new Act was enacted in the session of 1929, applying like the original to all occupations other than those of farm labourers, fruit pickers, fruit packers, fruit and vegetable canners and domestic servants. On Jan. 22, 1930, an order effective from that date was issued providing for a minimum rate of 50 cents per hour for "stationary steam engineers" and 40 cents per hour for "special engineers" as defined under the "Boiler Inspection Act".

In Manitoba an amendment, in 1931, to the Minimum Wage Act, made all orders applicable to boys under 18 years of age. The order regarding employment in retail stores was then amended to permit boys to work 50 hours per week instead of 48 hours, the maximum for female employees. In 1932 a special Regulation regarding employment of boys under 18 years of age was made, providing for a minimum of $8 per week for the first six months, $9 for the next six months, and $10 thereafter, with a maximum of nine hours work per day and 48 per week in manufacturing establishments, and garages and filling stations in Winnipeg and vicinity.

Section 3.—Cost of Living of Wage Earners.

An index number of the cost of living in working-men's families has been computed by the Department of Labour since 1913, and is published monthly in the *Labour Gazette*. This index is specifically designed for the purpose of measuring the trends of the cost of living for certain wage-earning classes with a somewhat lower standard of living than that which is measured by the Bureau of Statistics index number of retail prices, shown on pp. 810 of the present volume. The former wage-earner's index is used extensively in negotiations as to wage rates and in the settlement of industrial disputes. An abridgment of this index is presented in Table **4.**

4.—Changes in the Cost of Living in Canada from 1914 to 1932.[1]

(Average prices in 1913=100.)

Month and Year.	Food.	Fuel and Light.	Rent.	Clothing.	Sundries.	All Items.
Dec. 1914	108	98	97	103	100	103
Dec. 1915	111	96	94	115	110	107
Dec. 1916	138	109	95	136	122	124
Dec. 1917	167	125	102	158	134	143
Dec. 1918	186	146	111	185	151	162
Dec. 1919	201	148	122	210	164	176
Dec. 1920	202	200	142	232	173	190
Dec. 1921	150	172	150	177	173	161
Dec. 1922	142	177	155	162	174	157
Dec. 1923	146	172	158	164	171	159
Dec. 1924	144	162	158	159	169	156
Dec. 1925	157	166	158	159	166	160
Dec. 1926	152	162	156	157	166	157
Dec. 1927	152	158	156	155	166	157
Dec. 1928	154	157	157	157	166	158
Dec. 1929	161	157	158	156	166	160
Dec. 1930	138	156	160	148	165	151
Mar. 1931	124	156	160	141	164	145
June 1931	111	153	158	137	164	138
Sept. 1931	109	151	158	127	163	136
Dec. 1931	107	152	158	127	163	135
Jan. 1932	105	152	158	123	162	133
Feb. 1932	100	151	158	123	162	132
Mar. 1932	99	151	158	123	162	131
April 1932	98	150	158	123	162	131
May 1932	94	148	148	120	162	127
June 1932	93	148	147	120	162	126
July 1932	92	148	147	116	161	125
Aug. 1932	96	148	147	116	161	126
Sept. 1932	95	147	147	116	161	126
Oct. 1932	96	146	147	114	161	126
Nov. 1932	97	145	143	114	161	125
Dec. 1932	96	145	141	114	161	125

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[1] The figures for "all items" were calculated by giving the following weights to each group: Food 35 p.c.; Fuel 8 p.c.; Rent 18½ p.c; Clothing 18½ p.c. and Sundries 20 p.c.

Section 4.—Earnings in the Census Year, 1931.

The total number of wage earners in Canada reporting earnings for the census year ended June 1, 1931, was 2,477,038 or 96·53 p.c. of all wage earners and the total amount of their earnings was $2,102,877,400. Of this number 1,948,500 were males and their earnings amounted to $1,806,633,400 or 85·91 p.c. of the total earnings. Females reporting earnings numbered 528,538 and the total amount of their earnings was $296,244,000 or 14·09 p.c. of total earnings. The total weeks worked by wage earners reporting earnings was 104,947,274. The number of weeks worked by the males was 80,322,382 or 76·54 p.c. of the total for both sexes, and the total for the females was 24,624,892 weeks or 23·46 p.c. of the grand total.

5.—Wage Earners Ten Years of Age and Over, by Sex and Industries, with Total and Average Earnings and Number of Weeks Worked, in the Twelve Months Preceding June 1, 1931.

MALES.

Industrial Group.	Total Wage Earners.	Total Number whose Earnings are Stated.			Average Yearly Earnings and Average Number of Weeks of Employment for Census Year.	
		Persons.	Earnings.	Weeks.	Average Earnings.	Average Weeks.
	No.	No.	$	No.	$	No.
Agriculture	197,204	187,356	59,782,000	8,161,386	319	43·56
Forestry, fisheries, trapping	57,462	55,861	27,172,300	1,957,903	486	35·65
Mining, quarrying, oil and salt wells	68,507	67,223	60,711,500	2,440,913	903	36·31
Manufacturing	495,533	485,718	504,224,200	20,302,821	1,038	41·80
Vegetable products	56,261	55,161	59,301,900	2,464,954	1,075	44·69
Animal products	39,583	38,658	35,185,100	1,632,109	910	42·22
Textile products	46,728	45,612	42,899,700	1,910,106	941	41·88
Wood and paper products; printing, publishing, engraving, etc	131,539	128,994	129,044,800	5,418,360	1,000	42·00
Iron and its products	137,275	134,964	138,510,700	5,269,496	1,026	39·04
Non-ferrous metal products	31,385	30,782	38,329,200	1,366,795	1,245	44·40
Non-metallic mineral products	29,756	29,293	33,009,800	1,252,793	1,127	42·77
Chemical and allied products	12,275	11,869	16,310,200	543,491	1,374	45·79
Miscellaneous products	10,731	10,385	11,632,800	444,717	1,120	42·82
Electric light and power	17,452	17,158	25,550,100	807,332	1,489	47·05
Construction (including carpentry, plumbing, painting, etc.)	215,089	210,413	149,246,100	7,030,815	709	33·41
Transportation and communications (not including postal service)	260,200	251,123	294,168,200	11,054,179	1,171	44·02
Trade	203,683	197,668	227,270,500	9,126,021	1,150	46·17
Retail	160,436	155,901	162,549,000	7,143,680	1,043	45·82
Wholesale	43,160	41,688	64,630,900	1,978,960	1,550	47·47
Wholesale-retail dealing	87	79	90,600	3,381	1,147	42·80
Finance	57,627	53,882	93,241,600	2,641,117	1,730	49·02
Service	280,593	266,895	313,921,100	12,259,348	1,176	45·93
Professional	63,675	58,589	82,832,000	2,883,617	1,414	49·22
Public administration, *n.e.s.*, Dominion and Provincial	52,882	51,144	81,069,900	2,565,433	1,585	50·16
Public administration, *n.e.s.*, municipal	47,936	46,993	56,581,700	2,042,327	1,204	43·46
Public administration, *n.e.s.*, other	309	237	708,700	12,082	2,990	50·98
Recreational	11,548	11,162	11,946,700	471,143	1,070	42·21
Custom and repair	32,659	30,846	24,965,200	1,276,925	809	41·40
Business service	3,564	3,376	5,859,300	157,299	1,736	46·59
Personal service	68,020	64,548	49,957,600	2,850,522	774	44·16
Unspecified	163,946	154,234	50,285,500	4,498,245	326	29·17
All other industries (less than 10 persons)	1,038	969	1,060,300	42,302	1,094	43·66
All Industries	**2,018,334**	**1,948,500**	**1,806,633,400**	**80,322,382**	**927**	**41·22**

5.—Wage Earners Ten Years of Age and Over, by Sex and Industries, with Total and Average Earnings and Number of Weeks Worked, in the Twelve Months Preceding June 1, 1931—concluded.

FEMALES.

Industrial Group.	Total Wage Earners.	Total Number whose Earnings are Stated.			Average Yearly Earnings and Average Number of Weeks of Employment for Census Year.	
		Persons.	Earnings.	Weeks.	Average Earnings.	Average Weeks.
	No.	No.	$	No.	$	No.
Agriculture	1,800	1,673	459,600	73,328	275	43·83
Forestry, fisheries, trapping	306	295	131,100	11,653	444	39·50
Mining, quarrying, oil and salt wells	355	345	261,500	15,249	758	44·20
Manufacturing	108,860	107,152	58,112,000	4,652,290	542	43·42
Vegetable products	16,364	16,091	7,977,400	689,164	496	42·83
Animal products	10,926	10,756	4,872,900	458,256	453	42·60
Textile products	48,720	47,973	22,985,700	2,027,037	479	42·25
Wood and paper products; printing, publishing, engraving, etc.	14,193	13,948	9,335,700	638,455	669	45·77
Iron and its products	6,513	6,405	4,761,900	290,924	743	45·42
Non-ferrous metal products	5,051	4,985	3,365,300	226,079	675	45·35
Non-metallic mineral products	1,709	1,686	1,342,800	77,661	796	46·06
Chemical and allied products	2,833	2,793	1,909,400	130,836	684	46·84
Miscellaneous products	2,551	2,515	1,560,900	113,878	621	45·28
Electric light and power	1,472	1,459	1,354,900	73,201	929	50·17
Construction (including carpentry, plumbing, painting, etc.)	1,748	1,707	1,249,600	76,210	732	44·65
Transportation and communications (not including postal service)	23,218	22,684	18,145,100	1,109,531	800	48·91
Trade	75,906	74,446	46,893,800	3,449,911	630	46·34
Retail	67,319	65,957	39,882,100	3,046,266	605	46·19
Wholesale	8,587	8,489	7,011,700	403,645	826	47·55
Wholesale-retail dealing	–	–	–	–	–	–
Finance	24,822	24,388	21,425,100	1,198,340	879	49·14
Service	303,481	289,119	145,239,700	13,765.096	502	47·61
Professional	103,197	98,527	76,456,300	4,877,659	776	49·51
Public administration, *n.e.s.*, Dominion and provincial	12,404	12,019	11,372,000	602,776	946	50·15
Public administration, *n.e.s.*, municipal	2,865	2,802	2,557,300	136,911	913	48·86
Public administration, *n.e.s.*, other	111	110	126,800	5,626	1,153	51·15
Recreational	2,279	2,192	1,264,500	96,903	577	44·21
Custom and repair	10,317	10,075	5,009,000	454,532	497	45·11
Business service	1,403	1,372	1,103,700	63,841	804	46·53
Personal service	170,905	162,022	47,350,100	7,526,848	292	46·46
Unspecified	3,728	3,371	1,677,100	111,363	498	33·04
All other industries (less than 10 persons)	1,971	1,899	1,294,500	88,720	682	46·72
All Industries	**547,667**	**528,538**	**296,244,000**	**24,624,892**	**560**	**46·59**

CHAPTER XX. PRICES.[1]

Commodity prices naturally fall into two main divisions—wholesale prices and retail prices. Because the number of wholesale traders is smaller than that of retail traders, buying and selling by carefully defined grades more prevalent, and prices ranges at any particular time and place much narrower, it would appear that wholesale prices and their fluctuations are more easily and accurately ascertainable than retail prices. But this advantage is largely offset by certain difficulties inherent in the nature of index numbers of wholesale prices. The making of an index number of wholesale prices for general purposes requires the inclusion of a much wider range of commodities than is necessary for a retail or cost of living index. Moreover, wholesale commodities are in all stages from raw material to finished product, while retail prices are concerned only with the latter. At each stage in the evolution of a commodity we are frequently confronted with several grades, and this situation is complicated by the fact that grades undergo changes in the course of time. Hence, to secure quotations which give accurate continuity from month to month and year to year is a task in which eternal vigilance is the price of success. The maker of wholesale index numbers must be assiduous in acquiring and keeping up to date a knowledge of grades and qualities and, in dealing with a very large list of commodities, this is a difficult task. With retail prices, the question of grades is not quite sc involved and in some cases it is sufficient to obtain quotations on the basis of "the kind principally sold".

Wholesale transactions are generally between expert buyers and sellers, dealing on purely business principles. Accordingly, wholesale prices conform approximately to the operation of the principle of supply and demand, and are thus more valuable as an index to the current state of business. Retail prices, on the other hand, are governed to some extent by custom and do not respond easily to fluctuations in wholesale prices. Indeed, small fluctuations in wholesale prices are not fairly reflected in retail prices because of the limitations of the currency in representing small quantities of commodities. Retail prices vary considerably for the same commodity in different parts of the same city, owing to differences in the service rendered, in location of stores and in classes of customers.

Further, since wholesale prices are determined by the business situation of the moment while retail prices change more slowly, there exists what is technically called a "lag" between the two, retail prices not showing changes in fundamental business conditions until some time after wholesale prices. Thus, while wholesale prices in Canada reached a peak in May, 1920, and commenced to decline, in June, retail prices reached their corresponding peak in July, 1920, and began to decline in August. A similar "lag" has been noted in recent years, as is shown on the chart (p. 801) showing the course of wholesale and retail prices in Canada from 1914 to 1931.

Retail prices find one of their chief uses in the measurement of changes in the cost of living. This measurement is complicated by such changing factors as consumption, habits and standards of living, and qualitative changes in commodities included in the budget, particularly clothing. The difficulty of maintaining comparability between one period and another necessitates very thorough research and an elaborate collection of retail price data.

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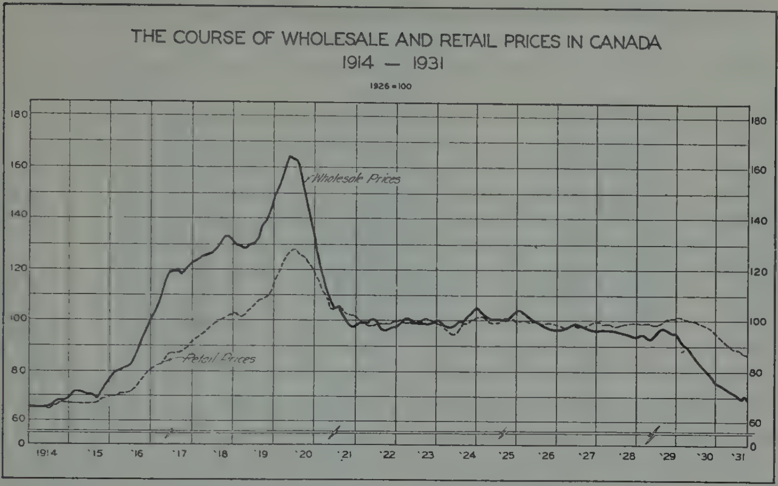
[1] Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. This Branch compiles and publishes statistics on: Prices (wholesale, retail, securities, services, exchange, interest rates, cost of living), Retail and Wholesale Trade, Foreign Capital Investments in Canada and Canadian Investments Abroad, Balance of International Payments, and other related subjects. For a complete list of the publications of this Branch, the reader is referred to Chapter XXIX, Section I, under "Internal Trade".



Section 1.—Wholesale Prices of Commodities.

Subsection 1.—Historical Review of Canadian Prices.

Until recently the index number of wholesale prices in Canada did not go back beyond 1890. However, it has now been extended backward to 1867 on the 1913 base, the added quarter of a century including a very interesting period to students of price statistics. The average index numbers for every year since Confederation are given in Table **1**. In that table will be noted the high prices of 1867, immediately following the close of the American Civil War and the Austro-Prussian War of 1866, and the tendency to declining prices in the years immediately following. Prices went up again after the Franco-German War of 1871 and reached a high point in 1872 and 1873, but the crisis of the latter year resulted in a decline. A downward trend persisted fairly steadily throughout the 25 years from 1872 to 1897 and was featured by an inadequate increase in the supply of gold. The gold supply of the world did not increase as rapidly as the supply of commodities, consequently more commodities could be secured for a given amount of gold. This gold shortage was accentuated by the demonetization of silver which ceased to be legal tender with gold and was reduced to the level of token money by the chief nations. Relief came through the discoveries of gold in the Rand mines and the application of the cyanide process to low-grade ores. The result was a rapidly increasing world production of gold from about 1890 down to the outbreak of the Great War, with consequent rising general prices as soon as the volume of the new gold became a large part of the total stock. Thus prices increased from the low point of 75·6 in 1897 to 100 in 1913 and 102·3 in 1914. Afterwards, the Great War, both through the scarcity of commodities which it occasioned and the inflation of the currency which it produced, drove prices rapidly upward to a maximum of 243·5 in 1920, followed by a rapid collapse to 152·0 in 1922. This was succeeded by a slight increase to 160·3 in 1925. The tendency from 1925-29 was downward, although the period was one of increasing prosperity—a condition normally associated with rising prices.

1.—Annual Index Numbers of Wholesale Prices in Canada, 1867-1932.

(1913=100.)

1867	133·0	1883	106·0	1899	81·4	1916	131·6
1868	128·7	1884	100·6	1900	85·8	1917	178·5
1869	126·5	1885	92·7	1901	84·5	1918	199·0
1870	123·5	1886	90·7	1902	86·2	1919	209·2
1871	124·5	1887	91·9	1903	86·9	1920	243·5
1872	135·7	1888	93·5	1904	87·0	1921	171·8
1873	133·8	1889	92·6	1905	87·8	1922	152·0
1874	129·0	1890	93·0	1906	92·6	1923	153·0
1875	120·7	1891	91·4	1907	95·2	1924	155·2
1876	116·6	1892	86·2	1908	90·9	1925	160·3
1877	115·1	1893	85·2	1909	91·4	1926	156·2
1878	104·3	1894	80·6	1910	94·3	1927	152·6
1879	101·0	1895	79·6	1911	95·0	1928	150·6
1880	112·9	1896	76·0	1912	99·5	1929	149·3
1881	109·9	1897	75·6	**1913**	**100·0**	1930	135·3
1882	112·1	1898	77·8	1914	102·3	1931	112·6
				1915	109·9	1932	104·2

Commencing in the fall of 1929, a severe economic depression set in which was accompanied by a drastic decline in wholesale prices. From 153·7 for August of that year the index continued to recede with few interruptions until December, 1932, when it stood at 100·0.

Subsection 2.—The Index Number on a Post-War Base (1926).

The official Canadian index number of wholesale prices and other price indexes computed by the Dominion Bureau of Statistics were revised, when prices appeared to have arrived at a condition of post-war normalcy, and calculated with the year 1926 as base.

Details of the method of constructing the new index number—the price series included, the weighting and the classification of commodities—were given at pp. 803-805 of the 1931 Year Book. The Dominion Bureau of Statistics annual index number of wholesale prices (1926=100) averaged 66·7 in 1932 against 72·1 in 1931. Monthly numbers declined in 1932, with a minor mid-summer interruption, from 69·5 in January to 64·0 in December, when the index was on an exact par with the 1913 average. Vegetable products, animal products, wood and wood products, and non-ferrous metals were chiefly responsible for the further recession in prices, although minor decreases occurred for textiles, iron products, non-metallics and chemicals. January and December group indexes, listed respectively, were as follows: vegetable products 56·0 and 50·1; animals and their products 65·0 and 57·4; fibres, textiles, and textile products 71·0 and 68·5; wood, wood products and paper 73·6 and 63·8; iron and its products 86·8 and 86·2; non-ferrous metals and their products 66·6 and 57·5; non-metallic minerals and their products 87·3 and 86·1; and chemicals and allied products 85·6 and 83·6.

Declines in both raw and partly manufactured, and fully and chiefly manufactured goods were less marked than in 1931. The first group fell from 61·9 to 55·0, and the second from 74·8 to 69·8 between 1931 and 1932. Animal and marine products in both sections were decidedly weak. There was little change apparent in the gap between raw and finished product prices, which became so marked during 1930-31, when raw field products dropped so precipitously.

A further fall of 14·0 p.c. occurred in the Canadian farm products index, as compared with a 31·6 p.c. decrease in 1931. The 1931 and 1932 annual average indexes were 56·3 and 48·4 respectively. Animal products declined from 77·6 to 60·7 and field products from 43·6 to 41·1.

2.—Weighted General Wholesale Price Index Numbers, by Months, 1924-32.

(1926=100.)

Month.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
January	100·4	106·0	103·0	97·8	96·9	94·0	95·3	75·9	69·5
February	100·4	105·4	102·1	97·6	96·8	95·0	93·9	75·5	68·9
March	98·8	103·5	101·3	97·3	97·7	95·6	91·8	74·5	69·0
April	96·7	100·2	101·2	97·3	98·3	94·5	91·2	73·9	68·2
May	96·4	101·7	100·2	98·3	97·9	93·4	89·7	72·5	67·4
June	97·5	101·5	100·1	98·7	96·9	93·4	87·7	71·8	66·4
July	98·5	101·2	100·1	98·5	96·0	97·2	85·3	71·3	66·4
August	100·4	101·7	99·1	98·3	95·3	98·4	83·7	70·5	66·7
September	98·5	100·0	98·5	97·1	95·4	97·8	82·1	69·7	65·9
October	100·5	99·9	98·1	97·2	95·2	96·8	81·0	69·9	65·0
November	101·0	103·2	97·7	96·9	94·9	95·7	79·5	70·7	64·7
December	103·0	104·7	97·9	97·2	94·6	96·0	77·7	70·4	64·0
Yearly Averages	**99·4**	**102·6**	**100·0**	**97·7**	**96·4**	**95·6**	**86·6**	**72·1**	**66·7**

3.—Annual Weighted Index Numbers of Wholesale Prices of Commodities, by Groups (Chief Component Material Classification), 1913-32, with Monthly Figures for 1930-32.

(1926=100.)

Year and Month.	Groups.								
	Vegetable Products.	Animals and Their Products.	Fibres, Textiles and Textile Products.	Wood, Wood Products and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	All Commodities.
	Numbers of Commodities Selected.								
1913–25	67	50	28	21	26	15	16	13	236
1926–31	124	74	60	44	39	15	73	73	502
1913	58·1	70·9	58·2	63·9	68·9	98·4	56·8	63·4	64·0
1914	64·8	72·6	56·9	60·3	67·3	94·7	53·7	65·3	65·5
1915	75·6	74·0	58·3	56·5	73·9	106·9	52·7	68·1	70·4
1916	87·0	85·0	77·6	64·0	104·6	135·1	58·0	78·0	84·3
1917	124·5	110·4	114·6	79·8	151·8	143·9	71·6	98·1	114·3
1918	127·9	127·1	157·1	89·1	156·7	141·9	82·3	118·7	127·4
1919	136·1	140·8	163·8	109·6	139·1	133·5	93·0	117·5	133·9
1920	167·0	145·1	176·6	154·4	168·4	135·5	112·2	141·5	155·9
1921	103·5	109·6	96·0	129·4	128·0	97·0	116·6	117·0	110·0
1922	86·2	96·0	101·7	106·3	104·6	97·3	107·0	105·4	97·3
1923	83·7	95·0	116·9	113·0	115·8	95·3	104·4	104·4	98·0
1924	89·2	91·8	117·9	105·9	111·0	94·8	104·1	102·5	99·4
1925	100·6	100·3	112·5	101·6	104·5	103·9	100·3	99·6	102·6
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	98·3	101·9	93·7	98·5	96·2	91·5	96·5	98·3	97·7
1928	93·0	108·1	94·5	98·7	93·2	92·0	92·5	95·3	96·4
1929	91·6	109·0	91·3	93·9	93·7	99·2	92·9	95·4	95·6
1930	77·7	99·1	81·8	88·7	91·1	80·7	91·3	92·8	86·6
1931	56·9	73·9	73·4	79·1	87·4	64·6	86·5	86·7	72·1
1932	54·8	59·7	69·7	69·1	86·3	59·0	85·5	84·0	66·7
1930.									
January	92·0	109·9	88·6	93·3	92·9	95·5	93·4	94·6	95·3
February	88·7	109·5	87·3	92·7	92·7	94·8	93·3	94·3	93·9
March	84·9	106·1	85·8	91·8	92·5	93·1	93·3	94·1	91·8
April	86·3	104·2	83·4	91·2	92·4	86·8	93·0	94·0	91·2
May	85·3	102·6	83·0	89·7	91·4	80·6	90·8	93·5	89·7
June	83·0	97·0	82·1	89·1	91·2	77·8	90·5	93·0	87·7
July	78·5	93·5	80·8	87·6	90·8	75·8	90·4	92·8	85·3
August	75·1	92·1	79·9	86·6	90·7	74·4	90·5	92·2	83·7
September	69·8	93·4	79·2	86·2	90·4	73·7	90·8	92·0	82·1
October	66·7	95·3	77·5	85·6	90·0	70·5	90·9	91·3	81·0
November	62·6	93·4	77·5	85·8	89·3	73·5	89·4	90·9	79·5
December	59·3	90·5	76·9	85·2	89·0	71·6	89·4	90·3	77·7

3.—Annual Weighted Index Numbers of Wholesale Prices of Commodities, by Groups (Chief Component Material Classification), 1913-32, with Monthly Figures for 1930-32—concluded.

(1926=100.)

Year and Month.	Groups.								
	Vegetable Products.	Animals and Their Products.	Fibres, Textiles and Textile Products.	Wood, Wood Products and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	All Commodities.
	Numbers of Commodities Selected.								
1913–25	67	50	28	21	26	15	16	13	236
1926–31	124	74	60	44	39	15	73	73	502
1931.									
January	57·8	88·2	75·0	81·7	88·7	69·1	89·3	88·3	75·9
February	59·0	85·2	74·1	81·5	87·9	67·9	88·9	88·2	75·5
March	58·7	80·6	74·3	81·3	87·8	68·6	86·9	87·9	74·5
April	59·1	77·8	74·2	80·8	87·6	66·7	86·0	87·8	73·9
May	58·6	72·4	74·2	80·3	87·5	63·6	84·7	86·9	72·5
June	57·9	70·5	74·6	79·7	87·4	62·1	84·8	86·7	71·8
July	56·7	71·2	73·7	78·9	87·1	62·5	85·0	86·8	71·3
August	55·3	70·9	73·2	77·9	86·8	60·9	85·0	86·3	70·5
September	54·0	69·0	72·4	76·8	86·8	60·7	86·5	84·6	69·7
October	54·4	68·2	71·9	77·2	87·3	63·0	86·7	85·6	69·9
November	58·1	67·4	71·7	76·3	87·0	63·8	86·5	85·5	70·7
December	56·4	66·4	71·8	76·7	87·3	66·3	87·5	86·6	70·4
1932.									
January	56·0	65·0	71·0	73·6	86·8	66·6	87·3	85·6	69·5
February	56·7	62·2	70·9	73·4	86·3	62·9	87·2	85·2	68·9
March	57·5	63·2	70·8	73·2	86·3	60·2	86·3	84·0	69·0
April	57·6	59·7	70·4	72·4	86·5	58·5	86·0	84·1	68·2
May	57·3	57·6	69·6	71·1	86·5	57·2	85·9	83·9	67·4
June	54·7	57·0	69·3	70·5	86·6	56·6	85·9	83·5	66·4
July	55·6	57·6	69·0	69·6	86·4	56·1	85·7	83·6	66·4
August	55·6	58·6	69·4	69·4	86·1	57·3	85·7	83·7	66·7
September	53·9	60·8	70·0	64·3	86·0	58·9	85·9	83·4	65·9
October	52·1	59·4	69·1	64·3	85·8	57·7	85·8	83·3	65·0
November	51·8	57·9	68·6	64·4	86·0	58·2	85·5	83·9	64·7
December	50·1	57·4	68·5	63·8	86·2	57·5	86·1	83·6	64·0

4.—Index Numbers of Wholesale Prices of Commodities, Classified According to Purpose, by Yearly Averages, 1914-32, and by Months, 1930-32.

(1926=100.)

Year.	Consumers' Goods.			Producers' Goods.					All Commodities.
	All.	Foods, Beverages and Tobacco.	Other.	All.	Producers' Equipment	Producers' Materials.			
						All.	Building and Construction.	Manufacturers'.	
	Numbers of Price Series.								
1913–25	98	74	24	146	15	131	32	99	236
1926–31	204	116	88	351	22	329	97	232	502
1914	62·7	65·2	59·7	69·7	52·0	72·1	62·9	74·3	65·5
1915	65·6	68·6	61·8	77·0	53·1	80·2	60·5	84·8	70·4
1916	74·7	81·7	65·8	88·1	55·7	92·5	69·6	97·9	84·3
1917	95·4	109·4	77·6	119·6	69·6	126·3	87·6	135·5	114·3
1918	107·0	119·4	91·4	131·5	80·4	138·3	100·9	147·2	127·4
1919	118·7	128·2	106·7	139·0	90·7	145·5	117·3	152·2	133·9

4.—Index Numbers of Wholesale Prices of Commodities, Classified According to Purpose, by Yearly Averages, 1914-1932, and by Months, 1930-32—concluded.

(1926=100.)

Year and Month.	Consumers' Goods.			Producers' Goods.					All Commodities.
	All.	Foods, Beverages and Tobacco.	Other.	All.	Producers' Equipment.	Producers' Materials.			
						All.	Building and Construction.	Manufacturers'.	
	Numbers of Price Series.								
1913–25	98	74	24	146	15	131	32	99	236
1926–31	204	116	88	351	22	329	97	232	502
1920	140·0	151·0	126·3	163·1	108·6	170·4	144·0	176·6	155·9
1921	108·0	105·4	111·4	112·8	113·8	112·6	122·8	110·2	110·0
1922	95·1	90·2	101·4	99·1	104·1	98·2	108·7	95·8	97·3
1923	93·7	91·2	97·0	97·8	102·5	97·1	111·9	93·7	98·0
1924	93·2	90·4	96·8	99·5	102·7	99·0	106·6	97·5	99·4
1925	97·2	97·7	96·5	104·9	99·2	105·5	102·9	106·2	102·6
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	95·7	99·4	93·3	98·5	101·1	98·1	96·1	98·6	97·7
1928	95·6	99·6	92·9	96·7	93·7	97·0	97·4	96·9	96·5
1929	94·7	100·0	91·1	96·3	94·6	96·5	99·0	95·9	95·6
1930	89·3	93·1	86·8	82·8	92·9	81·7	90·8	79·7	86·6
1931	76·2	70·4	80·0	67·9	90·0	65·4	81·9	61·7	72·1
1932	71·3	61·5	77·9	63·1	88·7	60·2	77·2	56·5	66·7
1930.									
January	95·2	103·4	89·8	94·5	96·2	94·3	97·4	93·6	95·3
February	95·0	103·3	89·4	91·8	96·2	91·5	96·6	90·4	93·9
March	93·3	100·2	88·7	89·5	96·2	88·8	96·1	87·2	91·8
April	92·3	99·4	87·5	90·0	96·2	88·3	94·7	86·9	91·2
May	91·3	98·1	86·7	87·1	91·5	86·6	92·9	85·2	89·7
June	89·5	94·2	86·4	85·0	91·4	84·3	92·2	82·5	87·7
July	87·7	90·5	85·9	81·5	91·2	80·4	89·5	78·4	85·3
August	86·3	87·2	85·7	79·9	91·2	78·6	87·8	76·6	83·7
September	86·1	86·7	85·7	76·7	91·2	75·1	86·8	72·5	82·1
October	86·0	87·0	85·4	74·6	91·2	72·8	85·6	70·0	81·0
November	84·5	83·9	84·9	73·4	90·9	71·4	85·7	68·2	79·5
December	83·2	81·0	84·6	71·3	91·5	69·0	85·0	65·5	77·7
1931.									
January	81·5	79·6	82·8	69·7	91·5	67·3	84·0	63·6	75·9
February	80·6	78·0	82·3	69·4	91·3	67·0	83·5	63·4	75·5
March	79·2	76·2	81·2	69·0	90·6	66·6	83·8	62·8	74·5
April	77·7	74·5	79·8	69·2	90·6	66·8	83·6	63·1	73·9
May	75·8	70·6	79·5	68·5	90·1	66·1	83·0	62·4	72·5
June	75·4	68·9	79·8	68·0	89·1	65·7	82·8	61·9	71·8
July	75·3	69·0	79·5	67·3	89·1	64·9	82·4	61·0	71·3
August	75·0	68·6	79·2	65·9	88·8	63·4	81·2	59·5	70·5
September	74·4	66·9	79·4	65·1	89·3	62·4	79·9	58·5	69·7
October	73·8	65·6	79·3	66·3	89·3	63·7	80·0	60·1	69·9
November	73·9	66·2	79·0	68·1	89·2	65·7	79·2	62·7	70·7
December	73·6	65·4	79·0	67·4	91·1	64·8	79·3	61·6	70·4
1932.									
January	73·1	64·5	78·9	66·5	91·1	63·8	79·4	60·4	69·5
February	72·5	63·0	78·8	66·4	91·1	63·7	79·3	60·2	68·9
March	72·5	64·2	78·0	66·0	90·8	63·2	78·9	59·7	69·0
April	71·3	62·4	77·3	65·4	90·7	62·6	78·7	59·0	68·2
May	70·9	60·8	77·7	64·4	88·2	61·8	77·8	58·3	67·4
June	70·5	59·7	77·7	63·1	88·1	60·3	76·8	56·6	66·4
July	71·0	61·3	77·4	62·8	88·1	60·0	75·6	56·5	66·4
August	71·1	61·3	77·7	63·1	88·1	60·3	75·3	57·0	66·7
September	71·6	62·2	77·8	61·5	88·1	58·5	76·2	54·6	65·9
October	70·8	60·8	77·5	60·2	86·8	57·2	76·5	52·9	65·0
November	70·3	60·0	77·1	59·7	86·0	56·8	76·6	52·4	64·7
December	70·0	59·5	77·0	58·6	87·7	55·3	75·7	50·8	64·0

5.—Weighted Index Numbers of Wholesale Prices of Commodities, Classified According to Origin and Degree of Manufacture, by Yearly Averages, 1915-32.

(1926=100.)

Item.	Numbers of Commodities.		1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
	1913-25.	1926-31.								
Aggregate combined indexes, Raw and Partly Manufactured	107	232	72·7	85·1	113·8	120·7	131·5	155·7	107·5	94·8
Aggregate combined indexes, Fully and Chiefly Manufactured	129	276	71·9	84·5	113·7	127·6	132·5	156·8	116·7	100·5
Articles of Farm Origin (domestic and foreign) Field (grains, etc.)—										
(a) Raw and partly manufactured	46	98	78·2	90·3	130·8	133·0	145·3	176·9	101·8	86·3
(b) Fully and chiefly manufactured	41	69	73·5	85·6	119·8	136·6	140·5	175·8	110·5	95·3
(c) Combined indexes	87	167	73·1	85·3	122·2	131·3	139·3	169·5	103·4	89·1
Animal—										
(a) Raw and partly manufactured	25	41	75·5	87·5	114·7	134·6	146·6	147·1	104·7	95·4
(b) Fully and chiefly manufactured	28	49	72·8	85·8	112·2	126·0	141·4	146·3	113·1	96·4
(c) Combined indexes	53	90	74·4	86·3	112·6	129·9	143·0	146·6	109·6	95·5
Canadian Farm Products—										
1. Field (grains, etc.)	20	46	76·9	88·4	134·3	132·0	142·4	166·5	100·3	81·3
2. Animal	16	13	79·2	92·3	119·2	134·3	152·0	149·5	108·1	98·8
3. Combined indexes	36	59	77·6	89·6	129·8	132·7	145·3	161·4	102·6	86·6
Articles of Marine Origin—										
(a) Raw and partly manufactured	2	5	72·7	80·6	99·5	119·1	127·8	133·7	91·6	90·2
(b) Fully and chiefly manufactured	6	11	62·7	66·3	85·6	109·2	111·3	106·9	91·6	92·2
(c) Combined indexes	8	16	64·6	69·0	88·1	111·1	114·3	111·7	91·6	91·9
Articles of Forest Origin—										
(a) Raw and partly manufactured	16	31	57·1	66·3	80·0	89·3	111·4	156·9	123·4	106·0
(b) Fully and chiefly manufactured	5	21	54·8	56·4	72·4	88·6	104·2	146·4	148·6	107·4
(c) Combined indexes	21	52	56·5	64·0	78·2	89·1	109·6	154·4	129·4	106·3
Articles of Mineral Origin—										
(a) Raw and partly manufactured	18	57	68·4	83·3	99·4	103·8	105·3	125·2	111·5	103·4
(b) Fully and chiefly manufactured	49	126	71·8	87·1	113·7	123·2	121·7	142·6	123·3	108·8
(c) Combined indexes	67	183	68·3	81·4	102·6	111·3	112·4	131·4	117·6	105·8

Item.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Aggregate combined indexes, Raw and Partly Manufactured	91·1	94·8	100·8	100·0	99·9	97·4	97·5	82·2	61·9	55·0
Aggregate combined indexes, Fully and Chiefly Manufactured	103·1	101·9	103·8	100·0	96·5	95·0	93·0	87·3	74·8	69·8
Articles of Farm Origin (domestic and foreign) Field (grains, etc.)—										
(a) Raw and partly manufactured	83·6	89·4	100·6	100·0	99·0	90·2	89·5	67·4	44·0	41·0
(b) Fully and chiefly manufactured	101·1	102·7	106·9	100·0	96·9	93·9	90·7	84·0	69·5	67·1
(c) Combined indexes	89·3	93·9	102·3	100·0	97·9	92·2	90·1	76·3	57·7	55·1
Animal—										
(a) Raw and partly manufactured	90·9	91·5	100·5	100·0	106·6	114·7	114·7	103·7	76·8	59·9
(b) Fully and chiefly manufactured	99·5	90·4	100·6	100·0	95·8	97·7	98·5	89·4	71·6	61·1
(c) Combined indexes	95·6	92·0	100·6	100·0	100·5	105·1	105·5	95·6	73·9	60·6
Canadian Farm Products—										
1. Field (grains, etc.)	73·3	82·6	98·1	100·0	99·9	92·6	93·8	70·0	43·6	41·1
2. Animal	94·9	96·9	105·4	100·0	105·7	114·3	112·5	102·9	77·6	60·7
3. Combined indexes	79·8	86·9	100·3	100·0	102·1	100·7	100·8	82·3	56·3	48·4
Articles of Marine Origin—										
(a) Raw and partly manufactured	99·5	95·8	94·4	100·0	96·7	91·5	96·8	86·9	70·3	56·2
(b) Fully and chiefly manufactured	80·1	91·8	99·1	100·0	101·5	104·0	108·5	98·4	77·6	66·6
(c) Combined indexes	83·6	92·5	98·3	100·0	100·2	100·6	105·3	95·3	75·6	63·8
Articles of Forest Origin—										
(a) Raw and partly manufactured	113·1	104·7	100·3	100·0	97·0	99·4	100·5	90·9	79·4	69·6
(b) Fully and chiefly manufactured	112·6	110·1	105·9	100·0	99·5	97·9	87·8	86·4	78·7	68·9
(c) Combined indexes	113·0	105·9	101·6	100·0	98·3	98·6	93·7	88·5	79·0	69·2
Articles of Mineral Origin—										
(a) Raw and partly manufactured	105·5	101·7	101·8	100·0	94·6	91·2	92·7	86·1	77·9	77·0
(b) Fully and chiefly manufactured	107·4	107·0	101·6	100·0	94·6	91·8	92·8	90·3	85·1	84·8
(c) Combined indexes	105·8	104·6	101·6	100·0	94·6	91·5	92·8	88·4	81·9	81·3

6.—Weighted Index Numbers of Wholesale Prices of Commodities, Classified According to Origin and Degree of Manufacture, by Months, 1926-32.

(1926=100.)

Origin and Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Aggregate combined indexes, Raw and Partly Manufactured												
1926	106·0	103·6	101·7	102·2	99·7	99·2	99·8	97·6	97·3	98·3	97·4	98·2
1927	98·8	98·5	98·4	99·0	101·4	102·2	102·0	100·9	98·8	99·5	100·0	100·8
1928	100·3	99·4	101·4	102·4	100·9	98·3	96·2	93·7	93·8	94·9	94·4	94·0
1929	94·2	96·2	96·6	94·7	93·0	92·9	101·6	102·3	101·8	100·5	97·2	98·9
1930	97·6	94·0	89·8	90·3	88·5	94·6	80·0	77·1	74·0	73·3	70·4	67·3
1931	66·4	65·8	64·4	64·1	62·7	61·2	60·4	59·5	58·5	59·7	61·4	60·2
1932	59·4	58·7	58·0	56·8	55·4	53·8	54·0	54·7	54·2	52·5	52·2	51·0
Aggregate combined indexes, Fully and Chiefly Manufactured—												
1926	103·0	102·1	101·5	100·5	99·8	100·1	99·7	99·3	98·6	98·1	97·4	97·5
1927	97·5	97·3	97·0	96·9	96·5	96·3	96·3	96·3	96·4	96·4	95·9	96·0
1928	95·6	95·4	95·7	95·7	95·3	95·3	94·8	95·0	95·1	94·6	94·2	93·8
1929	92·6	93·1	93·2	92·4	91·1	91·1	93·1	94·5	94·1	93·7	93·5	93·2
1930	92·0	92·3	91·3	90·0	88·9	87·2	85·8	85·4	84·8	83·9	82·8	81·5
1931	79·0	78·6	78·0	76·5	74·5	74·0	74·1	73·2	72·4	72·2	72·7	72·6
1932	71·3	70·7	71·5	70·9	70·3	69·4	69·5	70·2	69·3	68·8	68·3	67·8
I. Articles of Farm Origin (domestic and foreign)—												
A. Field (grains, fruits, cotton, etc.)—												
Raw and partly manufactured—												
1926	109·4	104·6	100·7	105·3	102·4	100·0	101·9	98·0	95·6	96·7	95·3	93·7
1927	92·9	93·7	95·4	97·1	104·5	107·1	106·3	104·0	97·9	96·8	96·9	95·5
1928	95·3	94·1	97·7	101·1	101·4	94·7	89·6	83·1	81·0	83·4	82·0	80·9
1929	83·0	87·7	86·4	83·7	80·4	81·2	99·9	100·7	98·4	94·3	89·0	90·1
1930	86·7	81·3	75·9	78·3	77·2	74·8	68·4	63·9	56·5	53·3	49·1	44·2
1931	43·4	45·3	44·7	45·9	45·8	45·7	44·3	42·3	41·1	42·9	46·6	43·7
1932	43·0	43·8	43·8	43·5	43·4	40·5	42·5	42·7	40·3	37·8	37·3	34·4
Fully and chiefly manufactured—												
1926	105·3	103·1	100·9	100·6	101·2	100·1	98·8	98·5	97·2	96·7	96·5	96·5
1927	96·6	97·0	95·9	96·2	97·4	98·5	98·5	97·5	96·7	96·7	96·2	96·5
1928	96·0	95·6	96·2	97·6	97·4	95·0	93·8	92·3	91·2	90·7	90·4	90·3
1929	89·6	90·5	89·6	88·3	86·7	86·7	90·5	93·8	94·2	93·8	92·9	92·7
1930	92·0	91·0	89·3	88·2	87·1	85·2	83·3	82·5	80·2	78·1	75·8	74·4
1931	71·8	71·9	71·8	71·4	70·4	69·5	68·7	67·7	66·7	66·6	69·0	68·6
1932	68·1	68·2	68·8	68·7	67·9	66·5	66·5	67·1	66·6	65·9	66·0	65·3
Combined indexes—												
1926	107·2	103·8	100·8	102·8	101·7	100·0	100·2	98·3	96·5	96·7	95·9	95·2
1927	94·9	95·5	95·7	96·0	100·7	102·5	102·1	100·5	97·2	96·7	96·5	96·0
1928	95·7	94·9	96·9	99·2	99·2	95·2	91·9	88·1	86·5	87·3	86·5	86·0
1929	86·6	89·2	88·1	86·2	83·8	84·2	94·8	97·0	96·1	94·0	91·1	91·5
1930	89·6	86·5	83·1	83·6	82·5	80·4	76·4	73·9	69·3	66·7	63·5	60·5
1931	58·7	59·6	59·3	59·0	59·0	58·5	57·4	56·0	54·9	55·7	58·7	57·1
1932	56·5	56·9	57·3	57·1	56·6	54·5	55·4	55·8	54·5	52·9	52·8	51·0
B. Animal—												
Raw and partly manufactured—												
1926	104·3	103·0	103·7	100·2	95·5	97·4	95·5	94·5	97·8	101·2	100·2	104·2
1927	108·4	106·3	105·8	106·8	102·9	102·1	102·1	102·3	106·2	109·5	111·8	117·6
1928	117·2	115·9	117·4	115·2	108·9	111·3	111·8	113·0	116·3	116·6	116·8	116·8
1929	113·3	112·8	114·9	113·4	114·0	112·1	111·9	113·0	115·6	118·4	115·3	119·8
1930	121·1	117·8	113·1	111·9	110·1	99·7	95·0	93·2	94·2	98·4	95·9	93·4
1931	92·1	86·9	83·4	81·1	77·0	72·7	72·3	73·3	71·5	71·1	71·0	69·8
1932	68·9	65·3	64·3	60·7	57·6	57·1	57·4	57·2	59·4	57·7	56·6	57·6
Fully and chiefly manufactured—												
1926	103·7	103·8	104·5	101·3	97·2	100·1	100·4	99·3	98·5	97·1	95·7	96·5
1927	97·0	96·3	97·2	96·7	94·5	93·1	93·0	94·8	96·8	97·1	96·3	96·2
1928	95·9	95·4	95·9	93·9	92·6	96·0	98·4	101·1	103·3	101·7	100·3	98·7
1929	98·9	99·9	101·0	100·4	97·3	96·9	98·6	99·5	97·3	97·1	97·4	96·7
1930	95·6	96·1	95·2	92·6	90·7	87·5	85·4	85·3	86·7	86·6	86·6	83·9
1931	81·7	80·3	77·8	75·2	69·7	69·3	71·1	69·6	67·4	66·4	65·2	64·8
1932	63·1	61·2	63·5	61·4	59·2	58·2	59·0	61·2	63·3	62·8	60·6	59·7

6.—Weighted Index Numbers of Wholesale Prices of Commodities, Classified According to Origin and Degree of manufacture, by Months, 1926-32—continued.

(1926=100.)

Origin and Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
I. Articles of Farm Origin (domestic and foreign)—concluded.												
B. Animal—												
Combined indexes—												
1926	104·0	103·5	104·2	100·8	96·5	98·9	98·3	97·2	98·2	98·9	97·7	99·8
1927	101·9	100·6	101·9	101·1	100·1	97·0	96·9	97·1	100·9	102·5	103·1	105·5
1928	105·1	104·3	105·2	103·1	99·7	102·6	104·2	106·3	108·9	108·2	107·5	106·5
1929	105·1	105·5	107·0	106·0	104·5	103·5	104·4	105·4	105·2	106·3	105·2	106·7
1930	106·7	105 5	103·0	101·0	99·1	92·8	89·6	88·7	90·0	91·7	90·6	88·0
1931	86·2	83·2	80·2	77·8	72·9	70·8	71·0	71·2	69·2	68·4	67·7	67·0
1932	65·0	63·0	63·8	61·1	58·5	57·9	58·3	59·5	61·0	60·0	58·9	58·8
II. Articles of Marine Origin—												
Raw and partly manufactured—												
1926	91·0	92·7	92·3	90·8	104·1	101·1	101·4	98·7	101·3	106·0	108·9	111·9
1927	102·3	98·2	90·9	90·6	101·4	95·2	92·2	91·7	100·2	108·4	104·4	93·4
1928	92·7	92·7	75·1	74·7	95·8	77·4	80·0	91·6	105·3	106·1	116·5	113·5
1929	101·3	95·0	96·9	89·7	92·2	91·1	93·2	91·8	96·2	107·7	107·7	99·6
1930	101·7	98·1	83·3	80·0	82·0	86·0	83·0	70·9	87·1	97·9	90·8	81·7
1931	80·9	72·9	72·9	68·8	63·8	64·2	60·7	64·7	69·6	76·0	77·7	69·5
1932	65·5	61·5	58·3	59·5	59·0	50·7	50·4	48·6	54·4	55·6	56·5	54·5
Fully and chiefly manufactured—												
1926	101·0	97·7	99·1	100·4	98·8	98·8	100·2	100·8	100·5	100·9	101·4	100·7
1927	101·4	101·4	100·9	101·6	101·8	102·3	101·7	101·9	102·3	103·3	101·2	99·9
1928	100·0	103·0	101·8	102·7	102·9	103·9	103·8	103·6	105·2	107·7	107·1	105·6
1929	107·2	107·9	108·6	108·6	107·9	107·1	107·0	107·1	109·0	111·4	110·5	109·7
1930	106·0	105·0	102·7	100·3	98·5	98·1	97·1	94·7	92·9	95·0	92·5	89·0
1931	86·2	84·6	76·2	76·1	74·2	75·8	76·0	75·3	74·9	74·8	72·5	72·4
1932	71·1	69·4	69·5	67·4	67·9	66·1	66·7	64·5	63·2	63·7	65·0	62·1
Combined indexes—												
1926	98·3	96·3	97·3	97·8	100·2	99·4	100 5	100·2	100·7	102·4	103·4	103·7
1927	101·6	100·5	98·2	98·0	101·7	100·4	99·1	99·1	101·7	104·7	102·1	98·1
1928	98·0	100·2	94·2	95·1	101·0	96·7	97·4	100·3	105·2	107·3	109·6	107·7
1929	105·6	104·4	105·4	103·0	103·6	102·8	103·3	103·0	105·5	110·4	109·7	107·0
1930	104·8	103·1	97·4	94·8	94·0	94·8	93·3	88·3	91·3	95·8	92·0	87·0
1931	84·8	81·4	75·3	74·1	71·4	72·7	71·9	72·4	73·5	75·3	73·9	71·6
1932	69·6	67·3	66·5	65·3	65·5	61·9	62·3	60·2	60·8	61·5	62·7	60·0
III. Articles of Forest Origin—												
Raw and partly manufactured—												
1926	101·5	101·4	100·8	100·5	100·4	100·3	101·2	100·3	100·4	97·8	97·4	97·8
1927	97·9	96·9	97·0	96·4	96·0	95·9	97·9	97·7	97·0	97·4	97·2	97·2
1928	96·7	96·9	97·6	97·8	98·0	98·2	100·4	101·2	102·1	101·1	101·3	100·7
1929	100 3	100·7	102·7	102·0	101·1	100·8	100·7	100·8	100·1	98·8	98·9	99·2
1930	99 3	98·1	96·3	95·0	93·5	92·4	89·1	86·9	86·2	85·0	85·2	84·1
1931	83·8	83·4	83·3	83·4	81·7	80·6	79 0	77·1	75·1	76·2	74·5	75·6
1932	74·4	74·3	73·5	72·5	69·9	68·6	66·9	66·4	67·3	67·4	67·6	66·2
Fully and chiefly manufactured—												
1926	100·2	100·1	100·1	100·1	100·1	100·1	99·9	99·9	99 9	99·9	100·2	100·2
1927	99·8	99·5	99·5	99·5	99·5	99·5	99·5	99·5	99·5	99·5	99·5	99·6
1928	99·7	99·7	99·7	99·7	99·7	99·6	96·1	96·1	96·1	96·2	96·2	96·2
1929	87·8	87·8	87·8	87·8	87·8	87·8	87·7	87·7	87·7	87·7	87·7	87·7
1930	87·6	87·5	87·5	87·5	86·0	86·0	85·8	85·8	85·8	85·8	85·8	85·9
1931	79·7	79·6	79·4	79 2	79·0	78·8	78·6	78·4	78 2	78 0	77·8	77·7
1932	72·9	72·8	72·7	72·5	72·4	72·3	72·2	72·2	62·1	62·0	62·0	61·9
Combined indexes—												
1926	100·7	100·7	100·4	100·3	100·2	100·2	100·5	100·1	100·1	98 9	98·8	99·0
1927	98·9	98·3	98·3	98·1	97·9	97·8	98·8	98·7	98·6	98·5	98·4	98·5
1928	98·3	98·4	98·7	98·8	98·9	98·9	98·1	98·5	98·9	98·5	98·6	98·3
1929	93·6	93·8	94·7	94·4	94·0	93·9	93·8	93·8	93·5	92·9	92·9	93·1
1930	93·1	92 4	91·6	91·0	89·5	89·0	87·3	86·3	86·0	85·4	85 5	85·1
1931	81·6	81·4	81·2	81·2	80·3	79·6	78·8	77·8	76·8	77·2	76·3	76·7
1932	73·6	73·5	73·1	72·5	71·2	70·6	69·7	69·5	64·5	64·5	64·6	63·9

6.—Weighted Index Numbers of Wholesale Prices of Commodities, Classified According to Origin and Degree of Manufacture, by Months, 1926-32—concluded.

(1926=100.)

Origin and Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
IV. Articles of Mineral Origin—												
Raw and partly manufactured—												
1926	102·8	103·2	102·6	98·4	97·6	98·8	99·3	99·4	99·1	98·6	98·5	101·7
1927	101·3	101·0	97·3	94·8	94·0	93·3	92·9	92·9	91·6	93·3	93·0	93·6
1928	92·0	92·0	91·9	91·5	90·4	90·6	90·1	90·5	90·8	91·0	91·2	92·2
1929	92·7	92·7	94·4	93·3	92·1	92·7	92·7	92·6	92·7	92·4	92·0	92·5
1930	92·2	91·9	90·4	89·5	85·6	84·8	84·3	84·2	84·3	83·2	81·9	81·7
1931	80·9	80·2	79·0	77·4	76·4	75·6	75·4	75·6	76·4	78·1	78·8	81·1
1932	80·6	79·8	77·7	77·3	75·8	75·8	75·6	76·3	76·4	75·8	76·3	77·1
Fully and chiefly manufactured—												
1926	99·7	100·2	100·4	99·9	100·0	100·2	100·2	100·2	100·2	100·3	99·0	98·9
1927	97·8	97·5	96·8	96·7	95·0	93·8	93·6	93·5	93·1	92·8	92·5	92·6
1928	91·9	91·9	91·7	91·4	91·3	90·9	91·1	91·7	91·7	91·9	92·1	92·3
1929	92·8	92·2	92·7	92·1	93·0	93·2	93·7	93·3	92·7	91·8	92·2	92·1
1930	92·2	92·0	91·8	91·1	90·8	90·3	89·9	89·8	89·6	89·2	88·7	88·2
1931	87·8	87·4	88·4	85·6	84·3	84·0	84·0	83·8	84·4	84·7	84·6	85·2
1932	85·1	84·5	84·4	84·5	85·3	85·4	85·1	84·9	85·0	84·8	84·6	84·6
Combined indexes—												
1926	101·1	101·5	101·4	99·2	98·9	99·6	99·8	99·8	99·7	99·5	98·8	100·2
1927	99·4	99·1	97·0	95·9	94·6	93·6	93·3	93·2	92·4	93·0	92·7	93·0
1928	91·9	91·9	91·8	91·4	90·9	90·8	90·7	92·2	92·3	91·4	92·3	91·5
1929	92·8	92·4	93·5	92·6	92·6	93·0	93·3	93·0	92·7	92·1	92·1	92·3
1930	92·2	92·0	91·2	90·4	88·5	87·8	87·4	87·3	87·2	86·5	85·7	85·3
1931	84·7	84·2	84·2	81·9	80·8	80·2	80·2	80·1	80·8	81·7	82·0	83·4
1932	83·1	82·4	81·4	81·3	81·1	81·1	80·9	81·1	81·2	80·8	80·9	81·2

Section 2.—Retail Prices of Commodities.

Collection of data and calculation of index numbers of retail prices and the cost of living are carried out in co-operation by the Dominion Bureau of Statistics (Department of Trade and Commerce) and the Department of Labour. Resultant series of index numbers are computed from different points of view. The computations of the Labour Department are designed to show changes in the cost of living for workingmen in cities. They are constructed from family budgets, principally a weekly family budget of staple foods, fuel and rent published monthly in the *Labour Gazette* since 1915 and annually since 1911; in addition, figures are included for clothing and sundry items and further data for fuel, light and rent. The Labour Department aims by this method to have a basis for computation that can be readily applied to the data for any given locality or district at any time, or for any class of labour, for instance, coal miners, who usually do not live in cities. Index numbers of retail prices and costs of living issued by the Bureau are constructed from a more general point of view, having for their object the measurement of the general movement of such prices and costs in the Dominion as a whole, and being so calculated as to make comparisons possible with other general index numbers constructed on similar principles, for example, the index of wholesale prices. Calculated as they are on the aggregative principle, *i.e.*, the total consumption of each commodity, the Bureau's index numbers afford an excellent measurement of changes in the average cost of living in the Dominion as distinguished from that of any particular class or section.

In the Bureau's index, 1926 is taken as the base year and is represented by 100 to bring it into conformity with other series of index numbers shown in this chapter. A description of the system of weighting of individual items, sub-groups and groups, and of the method of construction of this index number was given at pp. 812-818 of the 1931 Year Book. The Labour Department uses 1913 as 100 for both cost of living and wages index numbers. As will be seen from Table 7, the general cost of living again declined sharply during 1932, the annual index for that year being 82·0 as compared with 89·6 for 1931. The fall in the food index from 69·6 to 64·0 between January and December (inclusive), 1932, and the drop in the clothing index from 76·4 to 69·2, continued to be the factors chiefly responsible for the decline. Rentals reacted further from 99·3 to 90·0 during the year. Changes in the fuel and sundries indexes were of lesser proportions.

7.—Index Numbers of Canadian Retail Prices, on the New Base, 1914-32.

(1926=100)

Year.	Food Index.	Fuel Index.	Rent Index.	Clothing Index.	Sundries Index.	Total Index.
1914	68·9	64·5	62·2	63·9	66·2	66·0
1915	69·5	63·2	60·3	69·6	66·9	67·3
1916	77·5	64·5	60·9	79·7	70·2	72·5
1917	100·0	71·7	65·4	93·7	76·8	85·6
1918	114·6	78·9	69·2	109·5	86·1	97·4
1919	122·5	86·2	75·6	125·9	95·4	107·2
1920	141·1	102·6	86·5	153·2	104·0	124·2
1921	107·9	109·2	94·2	124·7	106·0	109·2
1922	91·4	104·6	98·1	105·7	106·0	100·0
1923	92·1	104·6	100·6	104·4	105·3	100·0
1924	90·7	102·0	101·3	101·9	103·3	98·0
1925	94·7	100·0	101·3	101·9	101·3	99·3
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	98·1	97·9	98·8	97·5	99·1	98·4
1928	98·6	96·9	101·2	97·4	98·8	98·9
1929	101·0	96·4	103·3	96·9	99·0	99·9
1930	98·6	95·7	105·9	93·9	99·4	99·2
1931	77·3	94·2	103·0	82·2	97·4	89·6
1932	64·3	91·7	94·7	72·8	96·8	82·0

8.—Index Numbers of Retail Prices, Rents and Costs of Services, by Months, 1930, 1931, 1932 and January-May, 1933.

(1926=100)

Year and Month.	Food Index.	Fuel Index.	Rent Index.	Clothing Index.	Sundries Index.	Total Index.
1930.						
January	106·5	96·6	105·5	96·5	99·7	102·1
February	106·0	96·6	105·5	95·9	99·6	101·9
March	104·8	96·7	105·5	95·9	99·6	101·5
April	101·1	96·5	105·5	95·9	99·7	100·4
May	100·7	95·1	106·5	95·0	99·6	100·2
June	100·4	94·9	106·5	95·0	99·6	100·2
July	98·5	94·8	106·5	95·0	99·6	99·5
August	96·3	95·1	106·5	95·0	99·6	98·9
September	93·1	95·1	106·5	91·6	99·3	97·2
October	92·8	95·7	105·5	91·6	99·3	97·0
November	92·6	95·7	105·5	91·6	99·1	96·9
December	91·5	95·7	105·5	88·3	98·9	95·9
1930 Averages	**98·6**	**95·7**	**105·9**	**93·9**	**99·4**	**99·2**
1931.						
January	89·1	95·1	105·5	88·3	98·0	94·9
February	85·6	95·2	105·5	88·3	98·0	93·9
March	82·8	95·2	105·5	84·7	97·4	92·2
April	80·5	95·1	105·5	84·7	97·4	91·5
May	77·7	93·6	103·3	84·7	97·4	90·2
June	75·0	93·3	103·3	81·1	97·3	88·7
July	74·7	93·1	103·3	81·1	97·3	88·6
August	75·5	94·2	103·3	81·1	97·3	88·9
September	73·5	93·5	103·3	78·6	97·2	87·7
October	71·4	93·9	99·3	78·6	97·2	86·3
November	71·5	94·1	99·3	78·6	97·2	86·4
December	71·2	93·9	99·3	76·4	97·1	85·9
1931 Averages	**77·3**	**94·2**	**103·0**	**82·2**	**97·4**	**89·6**
1932.						
January	69·6	93·9	99·3	76·4	97·1	85·4
February	66·5	93·8	99·3	76·4	97·1	84·4
March	66·0	93·6	99·3	74·5	96·8	83·9
April	65·4	92·8	99·3	74·5	97·0	83·7
May	62·9	91·0	93·9	74·5	97·1	81·8
June	62·1	90·9	93·9	71·9	96·9	81·0
July	61·4	90·7	93·9	71·9	96·8	80·8
August	63·5	91·8	93·9	71·9	96·8	81·4
September	63·0	91·7	93·9	70·7	96·7	81·1
October	63·6	90·7	90·0	70·7	96·7	80·4
November	63·9	90·4	90·0	70·7	96·6	80·4
December	64·0	89·3	90·0	69·2	96·4	80·0
1932 Averages	**64·3**	**91·7**	**94·7**	**72·8**	**96·8**	**82·0**
1933.						
January	62·8	89·3	90·0	69·2	96·4	79·7
February	60·6	89·3	90·0	69·2	96·2	79·0
March	60·4	88·9	90·0	66·5	96·0	78·4
April	61·3	88·8	90·0	66·5	96·0	78·6
May	61·9	88·5	84·0	66·5	96·0	77·6

The Family Budget.—A family budget constructed by the Department of Labour appears regularly in the *Labour Gazette*. This budget material has been used by the Bureau to obtain the tables which follow.

Table **9** shows the average prices of items included in the family budget in 1920 and in each of the years from 1923-32. These numbers are weighted by the quantities used by the Department of Labour in computing their monthly family budget. Table **10** gives the group indexes by provinces. An examination of the tables reveals the course of the budget, consisting of food, fuel and lighting, and rent, over the period shown.

9.—Prices of a Family Budget of Staple Foods, Fuel and Lighting, and Rent, for Sixty Cities in Canada, 1920, 1923-32.

Commodity.	Unit.	1920.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
		$	$	$	$	$	$	$	$	$	$	$
Staple Foods—												
Beef, sirloin steak...	1 lb.	0·389	0·283	0·280	0·285	0·294	0·308	0·345	0·363	0·356	0·286	0·206
Beef, chuck roast....	1 “	0·251	0·152	0·148	0·152	0·160	0·172	0·206	0·227	0·221	0·158	0·109
Veal, roast..........	1 “	0·274	0·182	0·179	0·182	0·193	0·203	0·226	0·245	0·239	0·183	0·122
Mutton, roast.......	1 “	0·354	0·277	0·278	0·289	0·298	0·291	0·300	0·309	0·302	0·253	0·169
Pork, fresh, roast...	1 “	0·397	0·264	0·240	0·275	0·302	0·282	0·273	0·300	0·298	0·223	0·129
Pork, salt mess.....	1 “	0·362	0·252	0·231	0·254	0·278	0·265	0·261	0·273	0·271	0·226	0·142
Bacon, breakfast....	1 “	0·559	0·394	0·337	0·385	0·431	0·393	0·379	0·393	0·399	0·301	0·186
Lard, pure leaf......	1 “	0·380	0·231	0·220	0·242	0·246	0·221	0·221	0·219	0·212	0·157	0·130
Eggs, fresh..........	1 doz.	0·709	0·442	0·439	0·486	0·466	0·487	0·478	0·475	0·457	0·337	0·454
Eggs, storage.......	1 “	0·608	0·370	0·368	0·417	0·398	0·424	0·412	0·403	0·394	0·271	0·321
Milk................	1 qt.	0·151	0·117	0·121	0·119	0·118	0·119	0·121	0·123	0·123	0·111	0·095
Butter, dairy.......	1 lb.	0·631	0·399	0·387	0·389	0·405	0·415	0·417	0·428	0·368	0·272	0·226
Butter, creamery...	1 “	0·696	0·451	0·435	0·439	0·448	0·463	0·461	0·470	0·405	0·300	0·259
Cheese, old.........	1 “	0·406	0·326	0·301	0·312	0·318	0·310	0·329	0·334	0·318	0·251	0·198
Cheese, new........	1 “	0·383	0·326	0·301	0·312	0·318	0·310	0·329	0·334	0·318	0·251	0·198
Bread, plain white..	1 “	0·093	0·067	0·069	0·078	0·076	0·077	0·077	0·078	0·075	0·062	0·056
Flour, family.......	1 “	0·079	0·044	0·045	0·057	0·053	0·053	0·052	0·051	0·047	0·033	0·027
Rolled oats.........	1 “	0·084	0·055	0·056	0·061	0·058	0·061	0·063	0·064	0·061	0·050	0·046
Rice, good medium.	1 “	0·164	0·104	0·105	0·109	0·110	0·108	0·105	0·104	0·101	0·092	0·082
Beans, hand-picked.	1 “	0·117	0·087	0·084	0·083	0·079	0·081	0·089	0·115	0·094	0·061	0·040
Apples, evaporated..	1 “	0·286	0·200	0·194	0·204	0·200	0·194	0·210	0·213	0·206	0·178	0·152
Prunes, medium....	1 “	0·270	0·185	0·160	0·156	0·158	0·148	0·135	0·141	0·155	0·121	0·106
Sugar, granulated...	1 “	0·197	0·117	0·109	0·085	0·079	0·083	0·079	0·073	0·068	0·062	0·058
Sugar, yellow.......	1 “	0·185	0·112	0·104	0·081	0·075	0·079	0·075	0·069	0·065	0·060	0·056
Tea, black..........	1 “	0·644	0·656	0·700	0·714	0·719	0·716	0·713	0·704	0·628	0·552	0·440
Tea, green..........	1 “	0·672	0·656	0·700	0·714	0·719	0·716	0·713	0·704	0·628	0·552	0·440
Coffee..............	1 “	0·608	0·539	0·550	0·604	0·612	0·612	0·607	0·604	0·572	0·492	0·412
Potatoes............	1 pk.	0·658	0·252	0·270	0·276	0·436	0·317	0·258	0·291	0·355	0·172	0·146
Vinegar, white wine	1 pt.	0·080	0·075	0·080	0·080	0·080	0·080	0·080	0·080	0·080	0·080	0·072
All Foods, Weekly Budget[1]............	$	**15·99**	**10·52**	**10·31**	**10·81**	**11·21**	**11·00**	**11·04**	**11·34**	**10·96**	**8·49**	**7·04**
Starch, laundry.......	1 lb.	0·144	0·122	0·122	0·124	0·124	0·123	0·123	0·123	0·123	0·120	0·117
Fuel and Lighting—												
Coal, anthracite....	1 ton	17·04	17·989	17·052	16·833	17·392	16·465	16·272	16·192	16·112	16·064	15·344
Coal, bituminous....	1 “	12·38	11·555	10·707	10·249	10·311	10·213	10·113	10·080	10·064	9·840	9·408
Wood, hard, best...	1 cord	13·09	12·764	12·485	12·280	12·195	12·128	12·077	12·208	12·176	11·696	10·256
Wood, soft..........	1 “	10·14	9·512	9·209	8·979	8·947	8·960	8·937	8·800	8·672	8·560	7·680
Coal oil.............	1 gal.	0·365	0·307	0·306	0·304	0·308	0·314	0·311	0·311	0·309	0·291	0·273
Rent, 1 month........	$	24·80	27·86	27·79	27·54	27·43	27·43	27·67	27·92	28·16	27·80	23·96
Grand Totals, Weekly Budget[1]....	$	**25·91**	**21·07**	**20·69**	**21·06**	**21·47**	**21·20**	**21·27**	**21·61**	**21·29**	**18·66**	**16·01**

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[1] Totals for "all foods" and "grand totals" are based upon the estimated weekly family consumption of the commodities specified in the table.

10.—Index Numbers of a Family Budget of Staple Foods, Fuel and Lighting, and Rent in Canada, by Provinces, 1923-32.

(Dominion Average for 1913=100.)

Province.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
STAPLE FOODS.										
Prince Edward Island	130·0	128·9	134·8	142·3	136·8	134·3	139·1	140·4	115·4	95·4
Nova Scotia	148·8	144·1	149·5	154·8	148·6	149·3	153·5	151·6	121·7	102·9
New Brunswick	146·6	144·7	147·7	155·9	150·1	149·0	151·4	149·1	119·9	102·1
Quebec	137·0	132·2	139·3	144·9	139·4	139·2	142·8	138·8	107·4	89·4
Ontario	142·7	139·5	145·0	154·2	150·8	151·0	153·8	148·7	114·5	95·7
Manitoba	136·4	133·1	141·7	142·2	141·6	145·6	151·2	144·5	108·8	93·0
Saskatchewan	141·1	137·7	148·2	148·6	150·7	152·3	158·3	149·1	110·4	93·4
Alberta	138·2	139·4	149·9	147·5	148·4	151·1	158·9	150·9	111·8	93·0
British Columbia	155·5	154·1	164·6	163·1	163·2	164·6	170·4	164·5	129·6	106·9
FUEL AND LIGHTING.										
Prince Edward Island	196·6	179·1	174·3	167·0	162·8	152·4	154·5	153·9	152·9	150·8
Nova Scotia	163·8	160·9	157·1	155·5	150·8	152·4	151·8	150·3	149·2	139·3
New Brunswick	174·8	169·5	164·9	168·1	164·4	161·8	160·2	160·7	156·0	147·6
Quebec	183·8	175·4	172·8	177·5	175·4	174·9	174·9	173·3	167·0	157·1
Ontario	194·1	183·0	179·6	182·2	179·1	177·0	177·0	175·9	173·3	164·9
Manitoba	203·9	195·3	188·5	184·8	183·2	184·8	189·5	190·1	181·7	159·2
Saskatchewan	201·7	195·2	186·4	181·2	182·7	183·3	181·2	174·9	160·7	112·6
Alberta	134·8	122·5	128·3	126·2	122·0	108·4	100·5	100·5	97·4	94·2
British Columbia	156·1	152·4	147·1	147·6	147·1	147·1	147·6	147·6	146·1	137·2
RENT.										
Prince Edward Island	121·7	123·8	122·5	118·5	118·5	118·5	122·3	123·8	123·8	123·8
Nova Scotia	117·7	118·5	117·5	117·9	117·9	117·9	117·9	121·1	126·9	126·9
New Brunswick	128·7	142·1	142·1	142·1	142·1	142·1	142·1	139·4	135·6	132·4
Quebec	118·0	121·1	120·8	120·8	121·7	122·7	123·2	125·9	124·4	118·1
Ontario	151·7	154·4	152·8	151·8	151·2	153·1	154·3	155·8	153·3	139·6
Manitoba	181·2	184·2	184·2	184·2	184·2	184·2	184·2	184·2	176·6	153·5
Saskatchewan	184·5	187·6	184·2	184·2	184·2	184·2	184·2	185·7	176·8	156·0
Alberta	157·7	150·8	148·0	151·8	152·4	151·8	157·9	161·7	160·4	143·6
British Columbia	132·1	134·3	135·4	135·8	136·6	138·1	139·8	140·8	140·2	131·4
GRAND TOTALS.										
Prince Edward Island	136·2	133·7	135·6	137·3	134·0	131·2	135·3	136·3	123·1	112·4
Nova Scotia	140·1	137·4	139·4	142·1	138·4	138·9	141·0	140·8	127·0	115·8
New Brunswick	147·7	146·9	147·9	152·7	149·1	148·2	149·2	147·1	129·9	118·4
Quebec	136·7	134·1	137·4	141·0	138·1	138·3	140·3	138·8	121·1	108·2
Ontario	152·5	150·2	152·2	156·8	154·6	155·0	156·9	154·5	135·4	119·8
Manitoba	160·7	158·6	162·2	161·9	161·5	163·8	167·4	163·9	141·5	122·3
Saskatchewan	163·9	162·1	165·3	164·8	166·2	167·2	170·0	164·7	139·5	117·0
Alberta	144·1	140·6	146·0	145·8	145·9	145·3	150·4	147·4	126·1	110·1
British Columbia	147·2	146·9	152·0	151·5	151·5	153·0	156·7	153·9	135·2	119·1

Section 3.—Index Numbers of Security Prices.

Many important advances have recently been made in the direction of improving the technique of making index numbers of security prices. The chief of these are: first, the computation of index numbers to serve different purposes; secondly, weighting of the index numbers so that they will accurately represent the market—an accurate index of market trends cannot be made on the basis of a simple average of market quotations or on any system which does not consider weighting; thirdly, using weighted average prices of individual securities rather than the average of high and low quotations or closing quotations. This last point is of considerable importance, because the average price at which a stock sells on a day's market frequently differs widely from the average of its high and low quotations or its closing price.

In the revised index numbers of security prices which have recently been issued by the Bureau full use of the improvements mentioned has been made, and these index numbers are now in line with the most advanced technique pertaining to the making of such indexes. In the revision, the base of the calculations was also changed. The basic period is now the year 1926, that is, prices prevailing in that year are taken as 100 and subsequent price movements are expressed as a percentage. The year 1926 was chosen as the base in conformity with the tendency which now prevails to substitute a post-war for a pre-war year. This year was also chosen in order to enable comparisons to be made with important indexes in the United States.

Two series of index numbers are now published by the Bureau on a weekly basis, *viz.*, investors' and traders' indexes. (See Tables **11** and **12.**) As will be apparent, these measure movements of an entirely different character. The traders' index is based upon the prices of the twenty-five best-selling industrial and public utility common stocks sold on the Montreal and Toronto Exchanges each week. This traders' index measures the trend of gains or losses for an "average" trader on the Montreal and Toronto Stock Exchanges, who buys and sells the leading common stocks in the same proportion as they are traded in the market as a whole, and who turns over his holdings every week. The investors' index, on the other hand, measures the trend of values for the investor who buys a list of stocks and holds them over a long period of time.

Investors' and Traders' Index Numbers of Common Stocks.—Monthly figures for the investors' index number of common stocks, computed by the Dominion Bureau of Statistics on the basis 1926 = 100, have been carried back to 1913. The index falls into two parts, *viz.*, the period subsequent to 1926 and the earlier period. For the period 1913 to 1926 those stocks were used which were included in the index number previously issued on the 1913 base, *viz.*, 31 industrials, 10 public utilities and 9 banks, or 50 stocks in all. In the subsequent period the list of stocks included in the monthly index numbers was enlarged and now contains 96 industrial, 18 domestic utilities, 8 companies located abroad and 8 bank stocks. Despite the difference in the number of stocks included, the trend of stock prices is adequately shown throughout the whole period. The larger number of stocks included in the revised index number, though adding little to the accuracy of the general index, gives more complete information regarding various groups of stocks traded on Canadian exchanges.

Banks are included in the monthly index numbers but not in the weekly, the trading in such securities not being, as a rule, sufficiently important to warrant their inclusion in a weekly index. In any case, their inclusion does not affect the general index by more than a point or two.

11.—Investors' Index Numbers of Common Stocks, by Months, 1932.

NOTE.—For earlier figures, see p. 695 of the 1932 Year Book, p. 823 of the 1931 Year Book, p. 782 of the 1930 Year Book, p. 784 of the 1929 Year Book, and pp. 796–800 of the 1927–28 Year Book.

Year and Month.	Types and Numbers of Securities.										
			Industrials.								
	Grand Total.	Banks Total	Industrials Total.	Iron and Steel, and Iron and Steel Products.	Pulp and Paper.	Milling.	Oils.	Textiles and Clothing.	Food and Allied Products.	Beverages.	Miscellaneous.
	130	8	96	19	9	5	4	9	21	8	21
1932.											
January	64·8	90·3	73·7	77·2	10·5	66·5	107·8	44·9	94·7	42·5	86·9
February	63·5	86·1	71·1	76·5	9·9	64·9	106·3	39·6	89·6	40·6	81·7
March	64·1	86·0	71·5	79·2	10·1	65·5	106·8	38·3	87·8	40·3	82·4
April	54·0	85·8	58·2	62·5	9·2	63·7	87·7	32·5	83·2	36·1	62·2
May	45·8	65·7	51·4	44·9	8·6	63·1	90·1	29·1	76·5	26·3	47·1
June	43·2	60·5	48·8	40·5	8·4	62·6	84·8	28·3	73·0	30·2	43·3
July	49·6	67·1	56·6	51·1	7·9	38·3	97·0	28·9	81·2	35·6	55·2
August	59·0	73·9	69·9	63·5	8·8	47·4	110·0	38·5	98·7	44·1	78·7
September	63·0	76·1	73·8	69·1	4·4	53·0	113·0	42·3	90·8	44·1	89·2
October	54·8	74·4	63·1	55·9	3·5	49·8	97·4	38·0	86·5	40·7	73·9
November	53·4	69·6	62·5	51·3	3·1	48·3	95·9	38·7	85·9	43·3	74·2
December	51·3	67·5	58·4	45·5	2·5	43·3	90·8	37·6	83·0	37·1	70·1

Year and Month.	Types and Numbers of Securities.						
	Public Utilities.				Companies Abroad.		
	Public Utilities Total.	Transportation.	Telephone and Telegraph.	Power and Traction.	Companies Abroad Total.	Industrial.	Utility.
	18	2	2	14	8	1	7
1932.							
January	59·1	40·9	88·3	76·8	54·3	67·1	42·9
February	59·1	43·3	82·0	75·3	54·5	65·2	44·8
March	59·8	46·2	81·1	73·6	55·8	67·0	45·7
April	48·9	34·4	68·8	63·7	47·4	59·1	37·1
May	36·9	26·0	63·8	45·0	49·4	66·3	34·9
June	34·9	24·7	59·6	42·7	46·5	59·6	35·1
July	41·8	31·5	59·9	51·6	49·9	65·6	36·4
August	51·9	42·7	71·6	60·4	52·7	72·8	35·7
September	56·9	47·6	76·3	65·9	56·5	77·6	38·7
October	49·1	39·0	73·4	57·7	47·4	64·3	33·1
November	46·6	38·2	70·8	53·1	48·3	67·9	31·8
December	45·1	37·4	68·3	50·8	48·9	69·1	32·0

12.—Traders' Index Numbers of Prices and Volume of Sales, Monthly Averages, January, 1929-May, 1933.

(1926=100.)

Note.—The Traders' Index measures the trend of gains or losses for an "average" trader, on the Montreal and Toronto Stock Exchanges, who buys and sells in the same proportion as stocks are traded in the market as a whole and turns over his holdings every week.

Column 1.—Weighted index numbers of the prices of Industrial and Public Utility common stocks on the Montreal and Toronto Exchanges.

Column 2.—Index numbers of the total money values of the 25 best selling stocks traded on the Montreal and Toronto Exchanges.

Month.	1929.		1930.		1931.		1932.		1933.	
	Price.	Value.	Price.	Value.	Price.	Value.	Price.	Value.	Price.	Value.
January	1,039·5	634·5	828·9	93·6	609·8	20·6	402·8	5·6	366·2	7·1
February	1,125·8	301·8	864·3	80·1	660·2	49·7	400·8	5·4	340·0	9·4
March	1,057·3	269·5	898·6	112·7	714·3	44·5	413·6	7·2	352·9	9·3
April	962·4	150·2	1,010·9	172·0	621·5	31·1	304·2	6·9	388·9	23·9
May	955·1	157·1	921·2	101·1	495·2	46·5	261·2	6·2	568·4	49·8
June	968·0	96·1	821·3	102·9	464·8	28·6	251·0	4·9	–	–
July	1,032·1	115·3	768·6	24·3	492·4	14·7	306·6	9·1	–	–
August	1,170·1	273·5	731·3	36·2	470·7	9·0	408·0	23·1	–	–
September	1,230·4	264·2	778·4	61·6	394·5	19·5	470·6	26·7	–	–
October	1,125·8	406·1	618·1	77·9	360·6	9·2	393·6	8·2	–	–
November	769·2	173·6	612·7	26·2	448·5	19·8	377·9	7·0	–	–
December	786·7	93·7	595·5	31·1	390·7	5·3	359·5	4·8	–	–

The value indexes shown above have replaced a former series which was calculated by the use of chain relatives, because the contraction in both sales and prices during the past two years had developed a tendency to exaggerated movements which is inherent in this type of index. It was therefore dropped and the fixed base aggregative index given was adopted in its stead. This series measures accurately changes in the total value of the shares traded in the twenty-five best-selling issues on the Montreal and Toronto Stock Exchanges. These variations have been found to correspond closely with the movements in total values of shares traded on the two exchanges mentioned.

Weighted Index Numbers of Mining Stocks.—A weighted index number of mining stocks is computed by the Dominion Bureau of Statistics on the basis 1926=100. Mines of a semi-industrial nature, such as International Nickel and Consolidated Mining and Smelting Company, do not appear here but are included in the Bureau's Investors' index of common industrial and public utility stocks.

Index numbers are calculated for the total stocks and for three groups, *viz.*, gold stocks, gold-copper stocks, and silver and miscellaneous stocks. The gold stocks are Premier, Coniaurum, Dome, Hollinger, McIntyre, Vipond Consolidated, Kirkland Lake Mines, Lake Shore, Sylvanite, Teck-Hughes and Wright-Hargreaves. Gold-copper stocks include Amulet, Hudson Bay, Sherritt-Gordon, and Noranda. Silver and miscellaneous stocks are Nipissing, Coniagas, Keeley, Castle-Trethewey, and Mining Corporation. The term "silver and miscellaneous" is used because all five stocks have important interests other than silver and two of the five are not now producing silver.

The course of mining stocks during the first half of 1932 was generally downward and the index fell from 59·7 in January to 48·3 in June. From 55·6 in July, the index advanced almost steadily to close the year at 63·1. Of the three sub-groups gold and gold-copper followed practically the same path as the general index. The gold series fell from 60·1 to 49·9 in June, but moved up to 62·7 in December. The gold-copper index receded from 62·5 in January to 47·8 in June and closed the year at 70·9. The silver and miscellaneous group opened the year at 26·5, moved down to 16·8 in June, but again reacted and closed at 21·9 in December.

13.—Weighted Index Numbers of Prices of Mining Stocks, by Months, January, 1931 to May, 1933.

(1926=100.)

Year and Month.	Types of Stocks.			
	Gold.	Gold-Copper.	Silver and Miscellaneous.	Total.
Numbers of Stocks	11	4	5	20
1931.				
January	68·1	74·4	34·1	68·5
February	72·0	82·7	36·8	73·3
March	72·3	96·7	43·9	77·1
April	77·5	103·7	39·2	82·3
May	72·9	90·1	35·1	75·9
June	68·6	75·1	31·5	69·1
July	66·8	79·1	32·0	68·6
August	66·0	77·1	33·1	67·8
September	62·6	67·8	32·1	63·1
October	60·7	58·4	29·4	59·5
November	64·4	68·6	32·3	64·6
December	59·0	62·4	27·6	59·0
1932.				
January	60·1	62·5	26·5	59·7
February	57·5	61·2	22·2	57·3
March	57·6	63·4	21·4	57·8
April	52·6	56·5	18·3	52·4
May	50·2	47·9	15·5	48·4
June	49·9	47·8	16·8	48·3
July	57·2	55·6	21·0	55·6
August	58·1	69·7	26·3	59·7
September	56·4	81·0	28·4	60·9
October	55·0	71·0	24·4	57·5
November	58·1	76·5	23·6	60·9
December	62·7	70·9	21·9	63·1
1933.				
January	66·8	74·7	26·5	67·1
February	74·7	84·7	28·1	75·3
March	66·6	81·5	26·5	68·4
April	72·9	88·6	28·0	74·5
May	84·5	116·2	36·5	89·6

Section 4.—Prices of Services.

A study of the prices of services sheds considerable light on the cost of living as such services are a considerable item in the average family budget. Information with regard to the trend of street car fares, of rates for manufactured and natural fuel gas, of domestic electric light rates and of telephone charges was published on pp. 801-804 of the 1927-28 Year Book. Later information shows that the prices of manufactured fuel gas have shown a downward tendency, the Dominion index number for 1932 being 95·0, as compared with 100·0 in 1926. The index number of the price of natural fuel gas also declined from 100·0 in 1926 to 92·1 in 1930 but rose again to 94·8 in 1932.

On the other hand, telephone rates have shown a distinct increase, the Dominion index number of domestic telephone rates having risen from 100·0 in 1926 to 107·2 in 1931. Again, the business telephone rate has risen from 100·0 in 1926 to 118·2 in 1931. Additional information and details by provinces will be found on pp. 192-201 of the Bureau of Statistics' Annual Report on Prices and Price Indexes, 1913-30.

Hospital Charges.—In view of discussions of the increased cost entailed by illness and hospital treatment, special investigations on hospital charges are now made annually and the results are given as Dominion averages in the following table. In general, this shows that hospital charges have increased over 90 p.c. since 1913, except for operating room charges, which have increased only about 60 p.c. At the same time, the cost of maintaining patients in hospitals has increased by about 111 p.c. Since the general cost of living in Canada had increased only from 50 to 60 p.c. prior to recent declines, it may be inferred that patients in hospitals have an improved standard of living and of comfort as compared with the conditions before the War.

The detailed results of this investigation, including the statistics by provinces, are to be found on pp. 203-206 of the Bureau of Statistics' Annual Report on Prices and Price Indexes, 1913-29.

14.—Average Daily Hospital Charges in Canada and Index Numbers thereof, 1913 and 1917-31.

(1913=100 for Index Numbers.)

Item.	1913.	1917.	1918.	1919.	1920.	1921.	1922.
Public ward $	0·99	1·19	1·32	1·47	1·54	1·67	1·71
Index number	100·0	119·4	134·8	149·7	156·0	170·5	176·6
Semi-private rooms $	1·57	1·79	2·03	2·27	2·44	2·63	2·69
Index number	100·0	114·7	130·9	145·8	156·3	168·6	173·1
Private rooms $	2·68	3·00	3·23	3·68	4·05	4·45	4·49
Index number	100·0	111·8	120·8	138·2	151·4	167·4	169·1
Operating room $	5·16	5·53	5·94	6·71	7·00	7·15	7·24
Index number	100·0	107·4	115·4	130·8	137·0	140·1	141·8
Cost of maintenance per head $	1·68	2·14	2·47	2·72	3·08	3·22	3·12
Index number	100·0	128·8	148·8	163·7	187·2	195·6	189·7

Item.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
Public ward $	1·73	1·77	1·78	1·83	1·86	1·96	2·03	2·04	2·03
Index number	180·9	182·8	184·4	184·4	186·1	197·9	203·9	204·4	204·1
Semi-private rooms $	2·73	2·74	2·84	2·82	2·83	2·85	2·87	2·89	2·89
Index number	175·6	176·1	182·2	185·2	186·3	187·8	189·1	190·4	190·2
Private rooms $	4·52	4·58	4·92	5·07	5·14	5·25	5·23	5·24	5·23
Index number	170·3	172·3	185·9	188·5	191·1	195·3	194·5	194·9	194·5
Operating room $	7·64	7·87	7·97	8·17	8·31	8·36	8·37	8·36	8·33
Index number	148·9	153·0	155·1	156·7	159·1	160·1	160·3	160·1	159·7
Cost of maintenance per head $	3·17	3·25	3·26	3·48	3·45	3·49	3·62	3·63	3·58
Index number	192·5	197·1	198·3	201·9	199·7	202·3	210·4	211·2	207·8

Section 5.—Index Numbers of Interest Rates.

Few economic statistics are of more significance than the net rates of interest paid on absolutely the safest securities, such as government bonds maturing on a fixed and definite date. Other interest rates naturally grade upward from the rates which the safest of possible borrowers has to pay, and from the fluctuations of that price an idea may be obtained as to the relation between the supply of, and the demand for, funds for investment.

Prior to the War the funded debt of the Dominion was entirely held outside the country, there being no home market for Canadian Government bonds. Since about the beginning of the century, however, the province of Ontario, the wealthiest and most populous of the provinces of the Dominion, has done its financing largely in Canada itself, and the fluctuation in the rate of yield of Province of Ontario bonds is thus the best long-term indicator of net interest rates in the Dominion. These yields, compiled originally by Wood, Gundy and Co., of Toronto, and furnished by that firm to the Bureau of Statistics, have been recalculated as index numbers on a 1926 base and are shown in Table **15**, a particularly interesting feature being the decline in the interest rates index from the high point of 129·4 in October 1920 to 87·7 in February of 1928. Since the latter date, the scarcity of funds for this type of investment forced the index number up to 104·4 in May and September 1929, from which point it gradually declined to 92·9 in September 1930. In January and February 1931 it had risen to 95·0 but in March and April it declined to 92·9 and in May to 91·9. In the fall months considerable demand upon the available supply of long term funds again sent the index up sharply to a peak of 119·8 in January, 1932, which was the highest point reached since October 1921. From that time until May, 1933, when the index was 98·1 the general movement of yields has been downward.

15.—Index Numbers of Interest Rates in Canada, Calculated from Yields of Ontario Bonds, 1900-33.

(Base 1926=100.)

Month.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
January	73·1	77·9	79·3	78·5	78·5	78·5	76·2
April	74·1	78·5	79·3	78·5	78·5	75·2	76·2
June	75·2	78·7	79·3	78·5	79·3	74·1	76·2
October	77·2	78·7	79·3	78·5	79·3	75·2	76·8
December	77·7	79·3	78·5	78·5	78·3	76·2	77·2
	1907.	1908.	1909.	1910.	1911.	1912.	1913.
January	78·3	88·7	82·5	81·4	83·5	83·5	88·7
April	81·4	87·7	81·4	82·5	81·0	85·6	89·8
June	85·6	86·6	80·4	82·5	81·0	86·6	90·8
October	87·7	85·6	80·4	82·5	81·4	87·7	91·9
December	88·7	83·5	81·4	83·5	83·5	88·7	91·9
	1914.	1915.	1916.	1917.	1918.	1919.	1920.
January	91·9	88·7	109·6	100·2	125·3	121·1	120·0
April	90·8	91·9	110·6	109·6	125·3	116·9	121·1
June	88·7	93·9	109·6	114·8	126·3	112·7	125·3
October	88·7	104·4	104·4	123·2	125·3	116·9	129·4
December	88·7	109·6	102·3	125·3	125·3	120·0	128·4

Month.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933:
January	125·3	116·9	112·7	106·5	99·2	100·2	97·1	89·8	97·1	102·3	95·0	119·8	99·2
February	125·3	114·8	110·6	106·1	100·2	100·2	97·1	87·7	98·1	102·3	95·0	115·9	98·7
March	125·3	113·8	109·6	106·1	100·2	100·2	96·0	88·7	101·3	101·3	92·9	110·6	100·0
April	125·3	112·7	107·5	106·1	100·2	100·2	95·2	88·7	103·3	101·3	92·9	111·3	101·3
May	126·3	112·7	107·5	106·1	99·2	100·2	95·0	90·8	104·4	101·3	91·9	113·2	98·1
June	126·3	112·7	107·5	105·8	99·2	100·2	95·0	91·9	103·3	100·8	91·9	114·4	-
July	128·4	112·7	107·5	103·5	99·2	100·2	95·0	93·9	103·3	100·2	92·9	110·6	-
August	128·4	112·7	107·5	99·2	99·2	100·2	95·0	96·0	102·3	96·0	91·9	103·3	-
September	127·3	111·7	107·5	99·2	99·2	100·2	95·0	96·0	104·4	92·9	97·4	101·9	-
October	126·3	111·7	107·9	100·2	100·2	100·2	93·9	95·0	103·3	93·9	103·3	98·1	-
November	119·4	112·7	107·3	99·2	100·2	99·2	93·3	95·0	103·3	93·9	105·4	102·3	-
December	119·4	113·2	107·3	99·2	100·2	99·2	90·8	96·0	102·3	93·9	108·6	102·7	-

Section 6.—Index Numbers of Import and Export Valuations.

Index numbers of imports and export valuations have been computed by the Dominion Bureau of Statistics since 1920 and are shown in Table **16** for the years 1923-32. Fifty export and 60 import commodities are included in the calculations. The year 1913 has been taken as the base. Index numbers were calculated on the aggregative principle and both an individual and a group system of weighting has been used on the basis of quantities imported or exported.[1]

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[1] For list of commodities included, see Appendix A of "Prices and Price Indexes, 1913-26".

16.—Index Numbers of Export and Import Valuations, calendar years 1923-32.

(1913=100.)

EXPORTS.

Group.	Number of Items.	1923.	1924.	1925	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Vegetables and their products	14	122·2	133·1	155·2	150·9	143·5	132·1	130·1	99·9	73·6	69·3
Animals and their products.	11	142·0	136·3	155·1	148·0	160·3	155·7	155·7	145·9	118·3	98·9
Fibres, textiles and textile products	2	134·2	161·1	165·8	140·3	126·7	143·7	126·0	89·4	68·0	47·8
Wood, wood products and paper	8	178·0	173·3	167·9	162·4	158·5	156·4	153·9	142·2	125·7	109·4
Iron and its products	4	90·8	88·3	83·8	82·9	92·0	81·0	82·9	80·5	79·3	79·1
Non-ferrous metals and their products	6	121·2	123·3	132·9	129·4	120·0	121·1	126·6	109·4	88·5	78·1
Non-metallic minerals and their products	2	190·1	181·1	169·9	172·8	173·3	172·8	177·0	164·0	155·9	140·7
Chemicals and allied products	3	118·2	109·0	109·6	107·6	97·0	87·4	85·5	83·7	76·6	70·5
Totals, Exports	50	136·8	139·6	151·7	147·0	144·0	137·6	136·9	116·8	95·2	85·1

IMPORTS.

Vegetables and their products	15	174·4	167·2	154·8	149·6	153·3	144·4	130·6	117·0	100·9	87·2
Animals and their products.	3	87·3	78·9	93·6	86·9	95·0	119·2	94·9	75·1	58·0	36·6
Fibres, textiles and textile products	15	182·4	181·7	184·0	158·0	143·7	153·8	147·1	123·0	86·0	74·6
Wood, wood products and paper	3	178·2	167·0	175·6	164·7	141·7	142·1	150·0	144·8	117·9	114·8
Iron and its products	11	108·8	107·4	98·6	95·0	95·0	93·6	95·7	99·4	92·6	94·1
Non-ferrous metals and their products	3	91·8	92·0	100·6	107·4	106·7	103·7	115·4	133·4	97·2	108·2
Non-metallic minerals and their products	7	162·2	145·4	143·9	141·7	130·1	124·8	123·6	117·2	100·6	97·5
Chemicals and allied products	3	143·7	146·9	140·3	148·7	148·2	138·6	134·3	154·5	151·7	164·0
Totals, Imports	60	147·6	142·0	139·6	131·7	127·0	127·3	122·9	115·1	95·3	89·5
Combined Indexes	–	141·7	140·7	146·3	140·1	136·3	133·0	130·6	116·0	95·2	87·1

CHAPTER XXI.—PUBLIC FINANCE.

The following treatment of public finance includes an outline of Dominion provincial and municipal finance in Canada, supported by the necessary detailed statistics, and closes with a brief discussion of the national wealth and national income of the Dominion as the basis of all public finance.

The great increase in Dominion expenditure since 1913 has, of course, been mainly due to the Great War and the burden of interest, pension charges, soldiers' civil re-establishment, etc., resulting from the War. Similar increases have also taken place during the same period in provincial and municipal expenditures. Thus in their fiscal years ended 1931, the total ordinary expenditure of the nine Provincial Governments was $190,754,202, as compared with $53,826,219 in 1916, only 15 years before—an increase of almost 254 p.c. (The aggregate interest payments of Provincial Governments rose from $7,817,844 in 1916 to $36,748,366[1] in 1931.) Again, between 1913 and 1931, the aggregate taxes imposed by the municipalities of Ontario increased from $34,231,214 to $128,657,684—an increase of 275·8 p.c. In Quebec the ordinary receipts of municipalities increased from $20,771,300 in 1914 to $63,637,511 in 1930—an increase of 206·4 p.c. In Manitoba the increase in municipal taxation has been from $9,922,537 in 1912 to $19,322,697 in 1930—an increase of 94·7 p.c. In Saskatchewan the grand total of municipal tax levies was $13,358,627 in 1914 and $29,609,893 in 1930. In Alberta the municipal taxes levied amounted to $10,022,246 in 1914 and to $14,887,676 in 1930. In British Columbia the taxes collected by the municipalities totalled $8,698,820 in 1914 and $18,260,430 in 1931. Finally, in the extreme east the aggregate tax receipts of the municipalities of Nova Scotia were $6,605,580 in 1931, as compared with $3,443,681 as recently as 1919—an increase of 92 p.c. in the last twelve years. The seven provinces covered by these statistics contained in 1931 approximately 95 p.c. of the population of the Dominion.

Section 1.—Dominion Public Finance.[2]

Historical Sketch.—Both under the French *régime* and in the earlier part of the British, the territorial or casual revenues of Canada, consisting of certain seigneurial dues and the proceeds of the sale of government timber and land, were reserved to the Crown, while the right of levying taxes and of regulating the trade and commerce of the colony was, after 1763, deemed to be vested in the British Parliament.

By the Quebec Act of 1774, certain duties on spirits and molasses were imposed, to be expended by the Crown in order to provide a revenue "towards defraying the expenses of the administration of justice and the support of the civil government of the province". A little later, in 1778, the British Government, by the Declaratory Act (18 Geo. III, c. 12), renounced forever the right of taxing the colonies to provide Imperial revenue, but maintained its claim to impose duties considered necessary for the regulation of trade, the proceeds to go towards defraying the expenditures of the colonial administration. After the Constitutional Act of 1791, the customs duties remained under the control of the Imperial Government, their revenue, as well as the territorial revenue above mentioned, coming in to the executive administration independently of the Legislative Assembly and thus making the executive power largely independent of the Legislature. In case these revenues proved insufficient, recourse could generally be had to the grant made by the Imperial Government for the support of the army. As time went on, however, the Crown revenues became more and more inadequate to meet the increasing expenditure, while the wave of economy in Great Britain after 1815 made it impossible any longer to supplement these revenues from military sources. On the other hand, the purely provincial revenues collected under the authorization of the Provincial Legislature showed an increasing surplus. The power of the purse thus began to pass into the hands of the Legislatures; further, in 1831 the British Parliament passed an Act placing the customs duties at the disposal of the Legislatures.

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[1] Nova Scotia and Ontario interest charges on loans issued for Power and Hydro Commissions, etc., met from earnings, amounted to $12,293,926.39 additional.

[2] The statistics in this section have been made up from the Public Accounts, with the exception of those parts dealing with recent modifications in taxation, war tax revenue, and incomes assessed for income tax in Canada, which were revised by the Department of National Revenue.

Under the Act of Union, a consolidated revenue fund was established. All appropriation bills were required to originate in the Legislative Assembly, which was forbidden to pass any vote, resolution or bill involving the expenditure of public money unless the same had first been recommended by a written message of the Governor General. The British Government surrendered all control of the hereditary or casual revenues, which were thenceforth paid into the treasury of the province to be disposed of as its Legislature should direct.

At the interprovincial conferences which took place prior to Confederation, it was decided that the new Dominion Government, which was to take over permanently, as its chief source of revenue, the customs and excise duties that had yielded the greater part of the revenues of the separate provinces (direct taxation being as unpopular in British North America as in other new countries), was also to assume the provincial debts and to provide out of Dominion revenues definite cash subsidies for the support of the Provincial Governments. (See Tables **16** and **17**.) Until the Great War, which made other taxes necessary, the customs and excise revenue constituted the chief resource of the Dominion Government for general purposes—the Post Office revenue and the Government railway receipts, which are not taxes at all, being mainly or entirely absorbed by the expenses of administering these services. Indeed, for many years preceding the War, customs and excise duties, together with the revenue from the head tax on Chinese immigrants, were the only items of receipts which were classified as taxes by the Department of Finance. In the last pre-war fiscal year these two items aggregated $126,143,275 out of total receipts on consolidated fund account amounting to $163,174,395, the Post Office and Government railways furnishing between them $26,348,847 of the remainder, offset, however, by expenditures on these two services amounting to $27,757,196. Miscellaneous revenue, largely fees, amounted in that year to $10,682,273—a comparatively small fraction of the total. As both customs and excise taxes were indirect, the average Canadian felt but little the pressure of taxation for Dominion purposes.

The War enormously increased the expenditure, and this increase had in the main to be met by loans. It is, however, a cardinal maxim of public finance that, where loans are contracted, sufficient new taxation should be imposed to meet the interest charge upon the loans and to provide a sinking fund for their ultimate extinction. This war taxation was begun in Canada within the first weeks of the War, when in the short war session of August, 1914, increases were made in the customs and excise duties on various commodities, including coffee, sugar, spirituous liquors and tobacco. In 1915 special additional duties of 5 p.c. *ad valorem* were imposed on commodities imported under the British preferential tariff and 7½ p.c.

ad valorem on commodities imported under the intermediate and general tariffs, certain commodities being excepted. New internal taxes were also imposed on bank circulation, on the income of trust and loan companies, on insurance in other than life and marine companies, on telegrams and cablegrams, railway tickets, sleeping-car berths, etc., also on cheques, postal notes, money orders, letters and post cards. In the following year, the business profits war tax (dropped in 1921)[1] was introduced, and in 1917 an income tax was imposed. In 1918 both of these taxes were increased and their application widened, and in 1919 the income tax was again increased, and still further augmented in 1920 by a surtax of 5 p.c. of the tax on incomes of $5,000 and over; the sales tax was also introduced in that year. The cumulative result of these war taxes was that, in the fiscal year ended Mar. 31, 1921, customs duties were for the first time displaced from their position as the chief factor in Canadian revenue, the war taxes yielding $168,385,327, as against the customs yield of $163,266,804. In 1922 war taxes yielded $177,484,161, while the yield of the customs fell to $105,686,645. Again, in 1923 the war taxes yielded $181,634,875 and customs duties $118,056,469, in 1924 $182,036,261 and $121,500,798, in 1925 $147,164,158 and $108,146,871, in 1926 $157,296,321 and $127,355,144, in 1927 $156,167,434 and $141,968,678. In 1928, however, the customs duties yielded $156,985,818 as against $150,319,087 collected by the war taxes, in 1929 $187,206,332 as against $145,029,742, in 1930 $179,429,920 as against $134,086,005, in 1931 $131,208,955 as against $107,320,633, and in 1932 $104,132,677 as against $122,266,064 collected by war taxes.

A more detailed sketch of the changes made in taxation from 1914 to 1926 will be found at pp. 755-759 of the 1926 Year Book, while similar information *re* tax changes in 1927 was given at p. 808 of the 1927-28 Year Book.

Recent Modifications in the System of Taxation.[2]—In 1928 the general rate of the sales tax was reduced from 4 to 3 p.c. The rate of the graduated income war tax on individuals was reduced by a further 10 p.c. of the 1926 tax, so that an individual paid only 80 p.c. of what he would have paid on the same income two years before. Similarly, the rate of taxation on the income of corporations and joint stock companies, which had been 10 p.c. two years before and 9 p.c. in 1927, was reduced to 8 p.c. on incomes in excess of $2,000. The $500 exemption for children was further extended to include this exemption for sons and daughters over 21 dependent upon the taxpayer for support on account of mental or physical infirmity. The customs tariff was also amended in the direction of reducing the duties upon machinery and other commodities used in production in the mining and fishing industries, on onion plants for propagation, also on disinfecting and spraying preparations in the fruit and horticultural industries, and on press blankets used in the printing and publishing industry. In the textile industries reductions were very generally made on cotton, woollen and other yarns used by manufacturers as the material for further production, also on many finished cotton, woollen, linen, flax, jute, silk and artificial silk products. Also the duty on many types of machinery used in the textile industry was generally reduced or even taken off entirely under the British preferential tariff. For details of these very numerous changes, see c. 17 of the 1928 Statutes.

In 1929 the general rate of sales tax was reduced from 3 p.c. to 2 p.c. The taxes on certain insurance premiums, on cables and telegrams, and on railway and other tickets were also repealed. The tax on sales or transfers of stocks was so modified as to be levied on the actual value rather than the par value of shares transferred; further, instead of a tax of 3 cents being levied for every $100 par value of shares transferred, the tax was made to vary from one-tenth of a cent per share, where shares are sold at 50 cents each or less, to four cents, where they are sold at over $100 each. A number of changes were made in the Customs Tariff by c. 39 of the 1929 Statutes.

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[1] Belated revenue from this tax has been collected in subsequent fiscal years down to 1932 (see Table 8, p. 835).

[2] For modifications in taxation in the years 1922 to 1927 inclusive, see the 1927-28 Year Book, pp. 807-809.

In 1930, the general rate of the sales tax was reduced from 2 to 1 p.c. *Bona fide* co-operative organizations, government or like annuities (to the extent of $5,000), and donations to churches, schools and hospitals (to a maximum of 10 p.c. of the net income of the taxpayer) were exempted from income tax, and the $500 exemption for children was extended to cover certain dependent relatives suffering from mental or physical infirmity. In the customs tariff, the iron and steel schedules were completely revised, seasonal tariffs were adopted in respect of fruits and vegetables, duties were reduced on tea, porcelain and chinaware and meats and increased on beans and butter, and so-called countervailing duties were imposed in respect of 16 commodities. The year was unusual in that it saw a second tariff revision, namely, that of the special session of September, when the anti-dumping clauses of the tariff were re-written and very many changes were made in rates of duty in the schedules. Increases were made *inter alia* on most agricultural products, on printed matter and manufactures of paper, on numerous commodities in the iron and steel group, on a wide range of textile items and on boots and shoes. Power was granted to the Governor in Council to prohibit the importation into Canada of goods exported to the Dominion from any country not a contracting party to the Treaty of Versailles.

In 1931, the general rate of the sales tax was increased from 1 to 4 p.c. Tax-free limit for cheques, receipts for money paid by banks, money orders, travellers' cheques and Post Office money orders was reduced from $10 to $5 and postage stamps could be used on such documents in lieu of excise tax stamps. A special excise tax of 1 p.c. was imposed on importations. As regards the customs tariff, the 1931 session saw several further amendments of the administrative clauses of the tariff, the powers of the Governor in Council in the matter of the making of tariffs being widened to include the granting and withdrawing of rates more favourable than those of the British preferential tariff. Provision was made for penalty in the case of any person guilty of using the tariff to increase prices to consumers. Rates were altered on many items, the countervailing duties having been rescinded in entirety at the special session in September, 1930. Increases were made on fresh and canned meats, tea, field and garden seeds, prepared foods, containers, wall-boards, spray mixtures, building stone and granite, steel plate, motor vehicles, wood veneers, various textiles, coal and coke, leather and leather goods, and numerous other commodities. The importation of second-hand motor vehicles, except under specified exceptional circumstances, was prohibited.

In April, 1932, the income tax was raised to 11 p.c. on corporations and joint stock companies. In the case of personal incomes, the deduction of 20 p.c. formerly allowed from the tax payable under the established schedule of rates was repealed; a surcharge of 5 p.c. was made on net incomes of over $5,000 and the exemptions were reduced from $3,000 to $2,400 for married persons, and from $1,500 to $1,200 for single persons. These changes applied to 1931 incomes. The sales tax was increased by 2 p.c. to 6 p.c., and the special excise tax on goods imported into Canada was raised from 1 p.c. to 3 p.c. The stamp tax on cheques, promissory notes, money orders, etc., was increased from 2 cents for each instrument over $5, to 3 cents on amounts between $5 and $100, and 6 cents over $100. Sleeping car tickets were taxed 10 p.c. (minimum 25 cents) and parlour car tickets 10 cents flat; there were also changes in the tax rates of cable and telegraphic messages and in the stock and bond transfer tax. No important tariff changes were made in view of arrangements for the Imperial Economic Conference in July, 1932. The tariff changes resulting from the Imperial Conference and enacted at the Fourth Session of the 17th Parliament, which opened on Oct. 6, 1932, are briefly dealt with on pp. 485-486.

Subsection 1.—The Current Balance Sheet of the Dominion.

A summary review of the current financial situation of the Dominion as at Mar. 31, 1932, is given in the balance sheet shown as Table **1**. This shows the gross debt on the above date to have been $2,831,743,563, partly offset by active assets aggregating $455,897,391, leaving a net debt of $2,375,846,172.[1] Non-active assets, including such public works as canals and railways, also loans to railways, amounted in the aggregate to $1,708,720,179, leaving a debit balance on Consolidated Fund Account on Mar. 31, 1932, of $667,125,993. The details of the various assets and liabilities are contained in the schedules accompanying the balance sheet and printed in the Public Accounts.

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[1] The net debt on Mar. 31, 1925 was $2,417,437,686; on Mar. 31, 1926, $2,389,731,099; on Mar. 31, 1927, $2,347,834,370; on Mar. 31, 1928, $2,296,850,233; on Mar. 31, 1929, $2,225,504,705; on Mar. 31, 1930, $2,177,763,959 and on Mar. 31, 1931, $2,261,611,936. See Table **18** p. 845.

1.—Balance Sheet of the Dominion of Canada, as at Mar. 31, 1932.

(From the Public Accounts.)

ACTIVE ASSETS—	
Cash on hand and in banks	$ 57,352,841
Specie reserve	64,660,602
Advances to provinces, banks, etc	173,183,733
Advances to foreign Governments	30,494,720
Soldier and general land settlement loans	47,804,080
Miscellaneous current accounts	82,401,415
Total Active Assets	$ 455,897,391
Balance of Liabilities over Active Assets, being Net Debt, Mar. 31, 1932 (exclusive of interest accrued and outstanding carried forward)	2,375,846,172
	$ 2,831,743,563
NON-ACTIVE ASSETS—	
Public Works, canals	$ 237,077,740
Public Works, railways	441,933,589
Public Works, miscellaneous	243,337,218
Military property and stores	12,035,421
Territorial accounts	9,895,948
Railway accounts (old)	88,398,829
Railway accounts (loans non-active)	614,406,239
Canadian National Steamships (loans non-active)	16,750,034
Miscellaneous investments and other accounts (non-active)	44,885,161
Balance Consolidated Fund as at Mar. 31, 1931	572,500,770
Excess of expenditure over revenue year ended Mar. 31, 1932	94,625,223
	$ 2,375,846,172
LIABILITIES—	
Dominion Notes in circulation	$ 157,388,180
Bank Note Circulation Redemption Fund	6,811,793
Post Office account, money orders, postal notes, etc., outstanding	3,448,855
Post Office Savings Bank deposits	23,919,677
Insurance and superannuation funds	90,147,427
Trust funds	18,752,801
Contingent and special funds	1,923,062
Province accounts	9,623,817
Temporary loan, New York	15,000,000
Funded Debt	2,502,859,760
Interest due and outstanding	1,868,191
	$ 2,831,743,563

NOTE.—The Dominion of Canada is also responsible for principal and interest on loans negotiated by railways, under various Acts of Parliament, amounting to $753,080,146. (See pp. 850 851 for details).

Subsection 2.—Receipts and Disbursements.

The receipts of the Dominion Government on Consolidated Fund Account for the fiscal year ended Mar. 31, 1932, were $329,709,056, a decrease of $19,878,243 as compared with the preceding year; besides these, special receipts amounted to $7,012,249—a total of $336,721,305 (Table **2**). The regular expenditure on Consolidated Fund Account was $375,403,344, while special expenditure amounted to $55,460,134. There were also a net expenditure on capital account of $16,979,788 and other expenditures of $3,132,275, including Government Merchant Marine $1,199,286, and advances to Quebec Harbour Commissioners (non-active) $1,379,000. Thus the total disbursements, inclusive of these and other advances, amounted to $450,955,541. There was an increase of $114,234,235 in the net debt (gross debt less active assets) during the year. (See Table **22**.)

Detailed statistics of receipts and disbursements are contained in Tables **2** and **3**. Tables **4** and **5** are historical tables giving the figures of the main items of Dominion receipts and expenditure since Confederation, while Table **6** shows the per capita receipts and expenditure for these years, calculated on census and estimated populations.

2.—Details of Revenue Receipts, fiscal years ended Mar. 31, 1928-32.

Item.	1928.	1929.	1930.	1931.	1932.
Consolidated Fund Receipts—	$	$	$	$	$
Taxation—					
Customs	156,985,818	187,206,332	179,429,920	131,208,955	104,132,677
Excise	57,400,898	63,684,954	65,035,701	57,746,808	48,654,862
War Tax Revenue—					
Banks	1,224,645	1,242,399	1,408,420	1,429,264	1,390,121
Trust and loan companies	345,430	7,641	–	6	–
Insurance companies	999,003	894,864	74,416	74,250	12,152
Business profits	956,031	455.232	173,300	34,430	3,000
Income tax	56,571,047	59,422,323	69,020,726	71,048,022	61,254,400
Sales tax	70,661,089	62,639,789	44,114,249	20,152,524	41,734,700
Tax on cheques, transportation tax, etc	19,561,842	20,367,494	19,294,894	14,582,137	17,903,121
Totals, Receipts from Taxation	**364,705,803**	**395,921,028**	**378,551,626**	**296,276,396**	**275,085,033**
Non-Tax Revenue—					
Canada Gazette	81,243	80,214	93,890	71,197	73,590
Canals	1,355,677	1,230,332	1,043,647	1,026,671	976,845
Casual	3,614,066	4,030,326	4,291,162	3,669,217	4,245,727
Chinese revenue	14,179	18,224	14,345	21,996	10,059
Dominion lands	3,688,595	4,070,339	4,139,104	1,655,401	485,364
Electric light inspection	563,913	563,964	546,957	632,151	402,189
Fines and forfeitures	568.140	655,485	748,343	433,716	233,513
Fisheries	119,144	109,300	110,724	73,937	40,519
Gas inspection	85,716	92,398	100,763	94,255	81,359
Inspection of staples (Grain Act)	2,677,877	2,992,541	2,047,207	2,179,047	1,484,826
Insurance inspection	123,768	131,626	138,780	148,942	149,902
Interest on investments	10,937,822	12,227,562	13,518,205	10,421,224	9,330,125
Law stamps	12,170	10,769	9,548	9,270	9,586
Mariners' fund	222,048	236,808	209,322	201,768	184,485
Military college	20,232	20,204	19,820	19,882	20,046
Military pension revenue	128,017	155,830	158,881	159,000	163,229
Ordnance lands	14,206	24,830	30,277	29,384	14,250
Patent fees	495,792	530,239	574,918	559,646	525,248
Penitentiaries	177,933	178,449	181,024	183,288	166,111
Post Office	31,562,580	30,611,964	33,345,385	30,212,326	32,234,946
Premium, discount and exchange	594,211	568,846	531,366	521,087	2,898,292
Public Works	453,084	459,963	461,432	417,059	359,264

2.—Details of Revenue Receipts, fiscal years ended Mar. 21, 1928-32—concluded.

Item.	1928.	1929.	1930.	1931.	1932.
Non-Tax Revenue—concluded.	$	$	$	$	$
Royal N.W.M.P. Officers' pensions	6,144	6,373	6,471	6,357	14,787
Steamboat inspection	127,852	136,932	131,356	144,332	113,232
Superannuation fund	172	81	5	–	–
Weights and measures	361,690	399,247	407,248	419,750	406,529
Other revenues	5,909	–	–	–	–
Totals, Consolidated Fund Receipts	**422,717,983**	**455,463,874**	**441,411,806**	**349,587,299**	**329,709,056**
Special Receipts—					
Miscellaneous revenue	6,924,594	4,687,607	4,505,186	6,573,577	7,012,249
Totals, Receipts	**429,642,577**	**460,151,481**	**445,916,992**	**356,160,876**	**336,721,305**

3.—Details of Expenditures, fiscal years ended Mar. 31, 1928-32.

Note.—"Adulteration of food", $147,770, "Marine hospitals", $208,846, and "Quarantine", $208,656, for 1932, have been classified in the Public Accounts of 1928-32 under the heading "Health", but are here deducted and shown separately so as not to break the comparability of the figures with those of earlier years. The Public Accounts item "Health" is therefore $868,323 for 1932, compared with the $303,050 shown here.

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Consolidated Fund Expenditure—					
Charges on Debt—					
Charges of management	884,532	923,363	1,015,766	920,136	866,812
Interest on debt	128,902,945	124,989,950	121,566,213	121,289,844	121,151,106
Premium, discount and exchange	42,233	67,254	72,976	19,477	3,625,697
Totals, Charges on Debt	129,829,710	125,980,567	122,654,955	122,229,457	125,643,615
Adulteration of food	120,800	130,000	156,567	147,517	147,770
Administration of justice	2,190,810	2,203,209	2,198,909	2,214,268	2,222,307
Air Board	,891,861	5,040,505	5,920,670	7,147,018	4,039,795
Agriculture	6,487,766	7,201,566	9,286,746	9,143,978	9,205,724
Bounties	82,807	79,290	40,030	92,181	150,548
Civil Government	11,576,140	11,819,981	12,258,009	12,628,382	12,135,790
Customs and excise	11,801,331	12,876,760	13,130,611	13,206,442	13,144,210
Department of Mines	624,184	679,179	805,748	789,327	634,773
Dominion lands	4,082,752	4,986,962	5,479,835	4,970,069	2,626,744
Fisheries	1,751,147	1,974,118	2,274,294	2,261,817	1,868,820
Government of N.W. Territories	392,378	456,440	574,950	763,125	513,234
Health	260,804	384,003	401,155	378,635	303,050
Immigration	2,704,698	2,631,967	2,757,331	2,255,249	1,873,006
Indians	4,199,541	4,598,292	5,134,553	5,866,219	4,880,322
Labour	1,411,027	2,349,671	2,366,399	6,559,520	10,657,853
Legislation	2,041,192	2,326,462	2,318,925	4,662,548	2,916,883
Lighthouse and coast service	2,771,031	2,812,900	2,874,623	3,391,826	2,594,356
Mail subsidies and steamship subventions	844,591	1,026,375	1,083,436	1,322,745	2,998,724
Marine hospitals	189,970	210,000	253,649	209,006	208,846
Militia	10,151,975	11,044,334	11,032,749	10,952,949	9,700,464
Miscellaneous	6,501,410	7,207,046	5,281,928	5,469,723	4,785.128
Naval service	1,702,225	1,836,488	3,013,396	3,597,591	3,043.201
Ocean and river service	3,749,105	3,683,256	5,136,332	3,638,981	4,109,895
Penitentiaries	1,755,763	1,807,655	2,561,115	3,236,816	2,736,876
Pensions	39,778,130	41,487,323	40,406,565	45,965,723	48,686,389
Post Office	31,782,968	33,483,059	35,036,629	36,292,604	34,448,986
Public Works	942,544	939,985	924,110	936,020	768,146
Railways and Canals (collection)	2,535,361	2,405,272	2,459,990	2,911,080	2,708,898
Public Works income	14,037,366	17,003,254	18,134,359	23,763,284	16,099,739

3.—Details of Expenditures, fiscal years ended Mar. 31, 1928-32—concluded.

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Quarantine	199,861	200,000	210,000	208,226	208,656
Railways and Canals, income	5,838,145	8,297,914	8,680,901	11,527,017	10,111,141
Royal Canadian Mounted Police	2,300,439	2,600,525	2,901,817	2,954,587	3,239,852
Scientific institutions	1,004,195	1,081,502	1,133,221	1,184,674	947,527
Soldiers' Civil Re-Establishment	6,958,811	7,901,957	8,494,277	9,774,357	11,154,426
Soldiers' Land Settlement	1,334,008	1,441,951	1,362,122	1,300,328	1,035,475
Steamboat inspection	131,065	141,485	140,253	143,764	143,394
Subsidies to provinces	12,516,740	12,553,725	12,496,958	17,435,736	13,694,970
Superannuation No. 1	625,005	577,661	531,253	490,442	448,276
Superannuation No. 3	19,038	17,792	15,930	14,412	12,643
Superannuation No. 4	723,825	671,611	631,293	592,846	548,832
Civil Service Widows' Annuities Act, 1927	130,946	140,570	142,708	140,167	134,715
Trade and Commerce	3,517,492	3,945,530	4,325,616	6,003,106	7,359,031
Weights and measures, etc	498,493	530,601	568,503	583,076	330,941
Yukon	178,511	184,181	186,374	201,451	179,373
Totals, Ordinary Expenditure	**336,167,961**	**350,952,924**	**357,779,794**	**389,558,289**	**375,403,344**
Special Expenditure—					
War and demobilization	1,656,011[1]	−669,399[1]	59,792[1]	61,889[1]	75,471[1]
Cost of loan flotations	13,057	11,330	17,071	193,338	1,350,223
Other charges	1,692,254[5,6]	2,055,823[5,6]	9,726,949[6,7]	16,485,621[6,7,8]	54,034,440[6,9]
Totals, Special Expenditure	**3,361,322**	**1,397,754**	**9,803,722**	**16,740,848**	**55,460,134**
Capital Expenditure[2]	**20,635,648**	**22,809,275**	**22,561,144**	**28,222,318**	**16,979,788**
Loans and Advances, Non-Active—					
Advances to railways (non-active)	-	-	2,932,653	-	-
Advances to Canadian Government Merchant Marine, Ltd., etc	999,837	758,000	2,491,297	1,826,942	1,199,286
Advances to Quebec Harbour Commissioners (non-active)	1,458,000	2,888,000	2,821,000	3,491,000	1,379,000
Miscellaneous debits and credits *re* sundry non-active assets accounts	16,035,672[3]	10,000,000[4]	−213,364	169,458	533,989
Grand Totals, Expenditure	**378,658,440**	**388,805,953**	**398,176,246**	**440,008,855**	**450,955,541**

[1] Expenditure on adjustment of war claims, $1,860,985 less $204,974 in 1928, less $669,399 in 1929, $94,996 less $35,294 in 1930, $110,371 less $48,482 in 1931, and $91,323 less $15,852 in 1932.

[2] Net figure, includes large expenditures on Welland Ship Canal. See. p. 696.

[3] Includes $13,935,673 to provide for revaluation and losses on account of Soldier Land Settlement loans; $2,000,000 on account of seed grain relief, Department of Interior; and $100,000 University Hospital, Edmonton, Alberta, transferred to non-active assets.

[4] To provide for revaluation and losses on account of Soldier Land Settlement loans.

[5] Includes $205,033 on account of Home Bank Depositors' Relief in 1928 and $17,109 in 1929.

[6] Includes $1,402,210 Government contributions to the Civil Service Superannuation Fund under the Act of 1924 (14-15 Geo. 5, c. 69) in 1928, $1,681,700 in 1929, $1,892,591 in 1930, $2,067,466 in 1931 and $2,228,626 in 1932.

[7] Includes $6,700,000 Reparations claims for compensation in 1930 and $500,000 in 1931.

[8] Includes $8,553,535 to cover 30 p.c. reduction of Soldier Land Settlement loans, in accordance with the Act of 1930, also $4,431,655 on account of Unemployment Relief Act, 1930.

[9] Includes $38,295,515 on account of Unemployment and Farm Relief Act, 1931.

4.—Principal Items of Dominion Expenditure, 1868-1932—continued on pp. 830-831.

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30; after 1906, on Mar. 31.

Fiscal Year.	Consolidated Fund.							
	Interest on Debt.	Charges of Management, Premium, Discount and Exchange.	Pensions.	Public Works.	Railways and Canals.[1]	Subsidies to Provinces.	Post Office.	Total Expenditure Chargeable to Consolidated Fund.[2]
	$	$	$	$	$	$	$	$
1868...	4,501,568	359,190	56,422	126,270	581,503	2,753,966	616,802	13,486,093
1869...	4,907,014	465,657	50,564	65,013	641,814	2,604,050	787,886	14,038,084
1870...	5,047,054	339,999	53,586	120,031	743,070	2,588,605	808,623	14,345,510
1871...	5,165,304	426,655	52,611	597,275	752,772	2,624,940	815,471	15,623,082
1872...	5,257,231	346,413	62,251	849,786	913,236	2,930,113	929,609	17,589,469
1873...	5,209,206	178,644	49,204	1,297,999	1,378,164	2,921,400	1,067,866	19,174,648
1874...	5,724,436	264,685	56,454	1,778,916	2,260,820	3,752,757	1,387,270	23,316,317
1875...	6,590,790	227,201	63,657	1,756,010	1,981,893	3,750,962	1,520,861	23,713,071
1876...	6,400,902	208,149	110,201	1,948,242	1,897,283	3,690,355	1,622,827	24,488,372
1877...	6,797,227	207,875	112,531	1,262,823	2,239,346	3,655,851	1,705,312	23,519,302
1878...	7,048,884	192,087	105,842	997,470	2,374,314	3,472,808	1,724,939	23,503,158
1879...	7,194,734	277,923	107,795	1,013,023	2,570,361	3,442,764	1,784,424	24,455,382
1880...	7,773,869	289,085	192,889	1,046,342	2,226,456	3,430,846	1,818,271	24,850,634
1881...	7,594,145	225,444	96,389	1,108,815	2,603,717	3,455,518	1,876,658	25,502,454
1882...	7,740,804	195,044	101,197	1,342,000	2,755,833	3,530,999	1,980,567	27,067,104
1883...	7,668,552	234,170	98,446	1,765,256	3,117,465	3,606,673	2,176,089	28,730,157
1884...	7,700,181	229,906	95,543	2,908,852	3,122,103	3,603,714	2,312,965	31,107,706
1885...	9,419,482	387,495	89,879	2,302,363	3,268,222	3,959,327	2,488,315	35,037,060
1886...	10,137,009	346,921	88,319	2,046,552	3,339,670	4,182,526	2,763,186	39,011,612
1887...	9,682,929	287,742	102,109	2,133,316	3,673,894	4,169,341	2,818,907	35,657,680
1888...	9,823,313	343,592	120,334	2,162,116	4,160,332	4,188,514	2,889,729	36,718,495
1889...	10,148,932	273,590	116,030	2,299,231	4,095,301	4,051,428	2,982,321	36,917,835
1890...	9,656,841	230,409	107,391	1,972,501	4,362,200	3,904,922	3,074,470	35,994,031
1891...	9,584,137	262,068	103,850	1,937,546	4,505,516	3,903,757	3,161,676	36,343,568
1892...	9,763,978	183,938	92,457	1,627,851	4,337,877	3,935,914	3,316,120	36,765,894
1893...	9,806,888	213,794	90,309	1,927,832	3,848,404	3,935,765	3,421,203	36,814,053
1894...	10,212,596	180,975	86,927	2,033,955	3,760,550	4,206,655	3,517,261	37,585,025
1895...	10,466,294	278,950	84,349	1,742,317	3,704,126	4,250,675	3,593,647	38,132,005
1896...	10,502,430	248,575	86,080	1,299,769	3,826,226	4,235,664	3,665,011	36,949,142
1897...	10,645,663	315,314	90,882	1,463,719	3,725,690	4,238,059	3,789,478	38,349,760
1898...	10,516,758	199,887	96,187	1,701,313	4,049,275	4,237,372	3,575,412	38,832,526
1899...	10,855,112	173,257	96,129	1,902,664	4,246,404	4,250,636	3,603,799	41,903,500
1900...	10,699,645	227,194	93,453	2,289,889	5,244,301	4,250,608	3,758,015	42,975,279
1901...	10,807,955	201,861	93,551	3,386,632	6,377,961	4,250,607	3,931,446	46,866,368
1902...	10,975,935	263,250	83,305	4,221,294	6,508,477	4,402,098	4,023,637	50,759,392
1903...	11,068,139	294,968	87,925	4,065,553	7,221,705	4,402,503	4,105,178	51,691,903
1904...	11,128,637	288,984	113,495	4,607,330	8,397,434	4,402,292	4,347,541	55,612,833
1905...	10,630,115	276,072	140,424	6,765,446	9,803,912	4,516,038	4,634,528	64,319,683
1906...	10,814,697	346,902	179,023	7,484,716	8,779,678	6,726,373	4,921,577	67,240,641
1907[3]..	6,712,771	244,548	125,832	5,520,571	7,011,858	6,745,134	3,979,557	51,542,161
1908...	10,973,597	383,820	187,557	8,721,327	10,586,114	9,032,775	6,005,930	76,641,452
1909...	11,604,584	356,707	191,533	12,300,184	10,780,126	9,117,143	6,592,386	84,064,232
1910...	13,098,160	358,973	216,697	7,261,218	10,215,038	9,361,388	7,215,338	79,411,747
1911...	12,535,851	376,777	240,586	8,621,431	11,123,251	9,092,472	7,954,223	87,774,198
1912...	12,259,397	455,011	245,045	10,344,487	12,330,463	10,281,045	9,172,036	98,161,441
1913...	12,605,882	502,988	283,188	13,468,505	13,766,180	13,211,800	10,882,804	112,059,537
1914...	12,893,505	487,184	311,900	19,007,513	14,935,138	11,280,469	12,822,058	127,384,473
1915...	15,736,743	554,729	358,558	19,343,532	13,876,060	11,451,673	15,961,191	135,523,207
1916...	21,421,585	731,836	671,133	12,039,252	20,777,830	11,451,673	16,009,139	130,350,727
1917...	35,802,567	496,387	2,814,546	8,633,096	27,124,004	11,469,148	16,300,579	148,599,343
1918...	47,845,585	488,712	8,155,691	7,432,901	34,849,608	11,369,148	18,046,558	178,284,313
1919...	77,431,432	1,305,676	18,282,440	6,295,060	45,494,584	11,327,236	19,273,758	232,731,283
1920...	107,527,089	1,462,658	26,004,461	9,016,246	8,418,024	11,490,860	20,774,312	303,843,930
1921...	139,551,520	1,102,088	37,420,751	10,846,875	8,886,458	11,490,860	22,696,561	361,118,145
1922...	135,247,849	4,109,601	36,153,031	10,574,364	8,624,094	12,211,924	28,121,425	347,560,691
1923...	137,892,735	1,003,068	32,985,998	9,978,440	7,691,261	12,207,313	27,794,502	332,293,732
1924...	136,237,872	993,907	33,411,081	11,900,847	2,126,803	12,386,136	28,305,941	324,813,190
1925...	134,789,604	849,694	34,888,665	12,029,578	1,996,152	12,281,391	29,873,802	318,891,901
1926...	130,691,493	884,388	37,203,700	13,416,045	2,120,223	12,375,128	30,499,686	320,660,479
1927...	129,675,367	987,265	37,902,939	11,178,054	2,152,015	12,516,740	31,007,698	319,548,173
1928...	128,902,945	926,765	39,778,130	14,037,366	2,535,361	12,516,740	31,782,968	336,167,961
1929...	124,989,950	990,617	41,487,323	17,003,254	2,405,272	12,553,724	33,483,058	350,952,924
1930...	121,566,213	1,088,742	40,406,565	18,134,359	2,459,990	12,496,958	35,036,629	357,779,794
1931...	121,289,844	939,613	45,965,723	23,763,284	2,911,080	17,435,736	36,292,604	389,558,289
1932...	121,151,106	4,492,509	48,686,389	16,099,739	2,708,898	13,694,970	34,448,986	375,403,344

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[1] Expenditure (Collection of Revenue). After 1919 railway receipts were applied directly to railway expenditure; this accounts for the great decline in the figures in 1920 and subsequent years. [2] Includes various non-enumerated items. [3] Nine months.

4.—Principal Items of Dominion

Fiscal Year.	Capital Expenditures.							
	Canals.	Canadian Pacific Railway.	Debts Allowed to Provinces.	Dominion Lands.	Inter-colonial and Connected Railways, Miscellaneous.	Public Works.	Hudson Bay Railway.	National Transcontinental Railway, Including Quebec Bridge.	Prince Edward Island Railway.
	$	$	$	$	$	$	$	$	$
1868	51,498	–	–	–	455,250	41,690	–	–	–
1869	130,142	–	–	–	282,615	8,548	–	–	–
1870	–	–	–	–	1,693,229	–	–	–	–
1871	–	30,148	–	–	2,866,376	–	–	–	–
1872	255,646	489,428	1,666,200	–	5,131,141	68,746	–	–	–
1873	256,547	561,818	13,859,080	–	5,019,240	99,517	–	–	–
1874	1,189,592	310,225	4,927,061	–	3,614,899	135,963	–	–	–
1875	1,714,830	1,546,242	–	–	3,426,100	189,484	–	–	46,087
1876	2,388,733	3,346,567	–	–	1,108,322	267,840	–	–	42,546
1877	4,131,375	1,691,150	–	–	1,318,352	258.833	–	–	200,000
1878	3,843,339	2,228,373	–	–	408,817	170,120	–	–	6,551
1879	3,064,099	2,240,286	–	–	226,639	77,179	–	–	40,129
1880	2,123,366	4,044,523	–	–	2,048,015	8,730	–	–	16,540
1881	2,077,029	4,968,504	–	334,681	608,733	187,370	–	–	–
1882	1,647,759	4,589,076	–	511,882	585,569	70,949	–	–	402
1883	1,763,002	10,033,800	–	556,870	1,616,633	119,869	–	–	57,186
1884	1,577,295	11,192,722	7,172,298	723,658	2,689,690	491,376	–	–	130,663
1885	1,504,621	9,900,282	5,420	303,593	1,247,006	182,306	–	–	76,957
1886	1,333,325	3,672,585	3,113,334	130,653	765,967	569,202	–	–	4,668
1887	1,783,698	915,057	–	162,392	926,030	353,044	–	–	5,800
1888	1,033,118	52,099	–	135,048	1,713,487	963,778	–	–	–
1889	972,918	86,716	–	130,684	2,623,137	575,408	–	–	–
1890	1,026,364	40,981	–	133,832	2,351,787	3,220,926	–	–	–
1891	1,280,725	37,367	–	94,847	1,184,318	515,702	–	–	–
1892	1,463,279	66,212	–	86,735	316,784	224,390	–	–	8,300
1893	2,069,573	413,837	–	115,038	299,081	181,878	–	–	–
1894	3,027,164	146,540	–	149,147	439,209	102,059	–	–	–
1895	2,452,274	49,209	–	99,842	327,605	102,393	–	–	–
1896	2,258,779	65,669	–	82,184	260,396	114,826	–	–	–
1897	2,348,637	14,054	–	91,412	190,570	129,238	–	–	–
1898	3,207,250	692	–	127,505	252,756	364,018	–	–	17,542
1899	3,899,877	8,419	267,026	151,213	1,081,930	385,094	–	–	22,000
1900	2,639,565	236	–	199,470	3,255,348	1,089,827	–	–	53,546
1901	2,360,570	8,979	–	269,061	3,633,837	1,006,983	–	–	280,174
1902	2,114,690	449	–	370,838	4,626,841	2,190,125	–	–	475,998
1903	1.823,274	–	–	449,542	2,254,267	1,268,004	–	–	829,414
1904	1,880,787	33,076	–	748,855	1,879,566	1,334,397	–	6,249	698,878
1905	2,071,594	–	–	794,410	4,755,578[2]	1,642,042	–	778,491	591,413
1906	1,552,121	–	–	599,780	3,765,171	2,359,528	–	1,841,270	496,125
1907[6]	887,839	–	–	526,583	1,512,491[3]	1,797,871	–	5,537,867	91,210
1908	1,723,156	600	–	768,244	4,369,738	2,969,049	–	18,910,253	390,962
1909	1,873,868	939	–	797,747	3,874,480	2,832,295	92,428	31,317,132	561,207
1910	1,650,707	–	–	785,157	1,278,409	4,514,606	53,043	19,868,064	206,397
1911	2,349,475	2,918	–	−5,508	763,833	3,742,717	184,150	23,715,549	94,321
1912	2,560,938	–	–	–	1,710,449	4,116,385	159,632	22,264,130	128,042
1913	2,259,642	–	–	–	2,406,988[4]	6,057,515	1,099,063	15,279,837	103,001
1914	2,820,661	–	–	–	4,348,000	10,100,017	4,498,717	15,274,206	129,575
1915	5,490,796	–	–	–	6,914,977	11,049,030	4,773,744	12,648,242	570,531
1916	6,170,953	–	–	–	7,861,899	8,471,229	4,887,131	9,825,265	1,350,473
1917	4,304,589	–	–	–	4,873,032	7,838,116	2,604,280	6,650,263	609,752
1918	1,781,957	–	–	–	–	6,347,201	1,879,699	103,167	–
1919	2,211,964	–	–	–	–	5,705,348	562,558	1,723,638	–
1920	4,550,761	–	–	–	3,285,736	38,869,683	−235,608	527,480	−3,540[5]
1921	5,450,006	–	–	–	731,018	27,559,809	30,036	20,164	–
1922	4,482,610	–	–	–	9,649	10,431,699	34,770	–	97,000
1923	4,995,184	–	–	–	59,950	3,411,510	27,803	–	–
1924	6,747,395	–	–	–	–	3,804,427	207,872	–	196,418
1925	10,619,903	–	–	–	–	6,030,320	−124,154	–	–
1926	12,024,456	–	–	–	–	4,805,949	−2,484	–	–
1927	13,845,689	–	–	–	–	2,920,670	2,823,905	–	–
1928	13,762,905	71	–	–	–	3,281,097	3,554,503[7]	–	63,419[5]
1929	13,164,582	–	–	–	−7,990,740	16,818,019	6,159,563	–	–
1930	9,324,177	–	–	–	−25,856	6,573,530	6,472,214	−415	–
1931	9,842,011	–	–	–	−277,535	12,009,276	4,139,690	8,877	–
1932	3,298,951	–	–	–	−2,504	1,199,286	5,236,668	−59,185	–

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[1] Including $2,725,504, for the improvement of the St. Lawrence; spent during the previous years by Montreal Harbour Commission. [2] Including $17,956, cost of new car for the Governor General. [3] Including $38,583, cost of new car for the Governor General. [4] Including $15,000, cost of new car for the Governor General. [5] Includes New Brunswick Railway. [6] Nine months. [7] Includes capital expenditure on Hudson Bay Terminals $880,278.

Expenditure, 1868-1932—concluded.

Capital Expenditures—con.				Other Expenditures.				
North-west Territories.	Militia.	Canadian Government Railways.	Total Capital Expenditure.	Railway Subsidies.	War and Demobilization.	Other Charges.	Total Expenditure.	Fiscal Year.
$	$	$	$	$	$	$	$	
–	–	–	548,438	–	–	37,158	14,071,689	1868
19,113	–	–	440,418	–	–	429,663	14,908,166	1869
1,821,887	–	–	3,515,116	–	–	155,988	18,016 614	1870
773,872	–	–	3,670,396	–	–	–	19,293,478	1871
241,889	–	–	7,853,050	–	–	223,456	25,665,975	1872
63,239	–	–	19,859,441	–	–	5,719	39,039,808	1873
–	–	–	10,177,740	–	–	4,019	33,498,076	1874
–	–	–	6,922,743	–	–	2,253,097	32,888,911	1875
–	–	–	7,154,008	–	–	315,764	31,958,144	1876
–	–	–	7,599,710	–	–	1,388,984	32,507,996	1877
–	–	–	6,657,200	–	–	385,413	30,545,772	1878
–	–	–	5,648,332	–	–	676,225	30,779,939	1879
–	–	–	8,241,174	–	–	949,948	34,041,756	1880
–	–	–	8,176,317	–	–	117,772	33,796,643	1881
–	–	–	7,405,637	–	–	201,885	34,674,625	1882
–	–	–	14,147,360	–	–	21,369	42,898,886	1883
–	–	–	23,977,702	208,000	–	2,567,453	57,860,862	1884
–	–	–	13,220,185	403,245	–	502,587	49,163,078	1885
–	–	–	9,589,734	2,701,249	–	10,534,973	61,837,569	1886
293,918	–	–	4,439,939	1,406,533	–	–	41,504,152	1887
539,930	–	–	4,437,460	1,027,042	–	155,623	45,064,124	1888
31,448	–	–	4,420,313	846,722	–	1,333,328	43,518,198	1889
4,773	–	–	6,778,663[1]	1,678,196	–	44,947	41,770,333	1890
2,901	–	–	3,115,860	1,265,706	–	68,074	40,793,208	1891
−1,243	–	–	2,164,457	1,248,216	–	2,093,569	42,272,136	1892
8,911	–	–	3,088,318	811,394	–	139,963	40,853,728	1893
−1,149	–	–	3,862,970	1,229,885	–	330,354	43,008,234	1894
−833	–	–	3,030,490	1,310,549	–	399,294	42,872,338	1895
−543	1,000,000	–	3,781,311	3,228,746	–	137,185	44,096,384	1896
3,284	745,965	–	3,523,160	416,955	–	682,881	42,972,756	1897
−1,272	173,740	–	4,142,231	1,414,935	–	944,589	45,334,281	1898
−1,853	387,810	–	6,201,516	3,201,220	–	236,399	51,542,635	1899
−1,473	230,851	–	7,467,370	725,720	–	1,549,098	52,717,467	1900
−1,632	135,885	–	7,693,857	2,512,329	–	900,312	57,982,866	1901
−1,543	299,697	–	10,077,095	2,093,939	–	1,040,374	63,970,800	1902
−3,040	428,223	–	7,049,684	1,463,222	–	1,541,763	61,746,572	1903
−2,616	1,299,910	–	7,879,102	2,046,878	–	6,716,235	72,255,048	1904
−2,478	1,299,964	–	11,931,014	1,275,630	–	2,277,812	78,804,139	1905
−1,767	1,299,876	–	11,912,104	1,637,574	–	2,487,323	83,277,642	1906
−1,352	975,283	–	11,327,792	1,324,889	–	1,583,297	65,778,138	1907[6]
−911	1,297,905	–	30,428,996	2,037,629	–	3,470,603	112,578,680	1908
−1,045	1,243,072	–	42,592,122	1,785,887	–	4,999,283	133,441,524	1909
−650	1,299,970	–	29,655,703	2,048,097	–	4,280,227	115,395,774	1910
−33,688	–	–	30,813,767	1,284,892	–	2,988,393	122,861,250	1911
–	–	–	30,939,576	859,400	–	7,181,665	137,142,082	1912
–	–	–	27,206,046	4,935,507	–	255,787	144,456,878	1913
–	–	–	37,180,176	19,036,237	–	2,640,162	186,241,048	1914
–	–	–	41,447,320	5,191,507	60,750,476	5,186,016	248,098,526	1915
–	–	–	38,566,950	1,400,171	166,197,755	3,186,898	339,702,502	1916
–	–	–	26,880,032	959,584	306,488,815	15,275,345	498,203,118	1917
–	–	32,999,880	43,111,904	720,405	343,836,802	10,706,787	576,660,210	1918
–	–	14,827,758	25,031,266	43,805	446,519,440	−7,283,582	697,042,212	1919
–	–	22,307,366	69,301,878	334,845	346,612,955	19,995,313	786,030,611[8]	1920
–	–	6,221,774	40,012,807	–	16,997,544	492,048	528,302,513[8]	1921
–	–	1,239,605	16,295,333	–	1,544,250	301,518	463,528,389[8]	1922
–	–	1,313,022	9,807,124	–	4,464,760	4,042,931	434,735,277[8]	1923
–	–	−94,835	10,861,277	−1,523	446,083	7,902,759	370,589,247[8]	1924
–	–	24,442	16,550,511	–	506,931	3,953,433	351,169,803[8]	1925
–	–	−29,372	16,798,549	–	191,392	6,330,092	355,186,423[8]	1926
–	–	−31,562	19,558,703	–	64,485	7,814,977	358,556,751[8]	1927
–	–	−26,347	20,635,648	–	1,656,011	1,705,311	378,658,440[8]	1928
–	–	−5,342,149	22,809,275	–	−669,399	2,067,153	388,805,953[8]	1929
–	–	217,494	22,561,144	–	59,702	9,744,021	398,176,246[8]	1930
–	–	2,500,000	28,222,318	–	61,889	16,678,959	440,008,855[8]	1931
–	–	1,067,348	16,979,788	–	75,471	55,384,663	450,955,541[8]	1932

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[8] Includes advances to railways (non-active), amounting to $45,780,690 in 1920, $109,662,655 in 1921, $97,950,645 in 1922, $77,863,938 in 1923, $23,710,617 in 1924, $9,934,453 in 1925, $10,000,000 in 1926, $10,000,000 in 1927, $2,932,653 in 1930; together with advances of $5,979,856 in 1923, $1,500,000 in 1924, $900,000 in 1925, $668,000 in 1926, $426,817 in 1927, $999,837 in 1928, $758,000 in 1929, $2,491,297 in 1930, $1,826,942 in 1931 and $1,199,286 in 1932 to the Canadian Government Merchant Marine, etc; also other advances shown at the end of Table 3 on p. 828.

5.—Principal Items of Receipts of Canada on Consolidated Fund Account, 1868-1932.

Fiscal Year.	Customs Duties.	Excise Duties.	War Tax Revenue.[1]	Total Revenue from Taxation.	Interest on Investments.	Post Office and Money Orders.	Total Revenue Receipts.[2]
	$	$	$	$	$	$	$
1868	8,578,380	3,002,588	–	11,700,681	174,073	525,692	13,687,928
1869	8,272,880	2,710,028	–	11,112,573	824,424	535,315	14,379,175
1870	9,334,213	3,619,623	–	13,087,882	383,956	573,566	15,512,226
1871	11,841,105	4,295,945	–	16,320,369	554,384	612,631	19,335,561
1872	12,787,982	4,735,652	–	17,715,552	488,042	692,375	20,714,814
1873	12,954,164	4,460,682	–	17,616,555	396,404	833,657	20,813,469
1874	14,325,193	5,594,904	–	20,129,185	610,863	1,139,973	24,205,093
1875	15,351,012	5,069,687	–	20,664,879	840,887	1,155,332	24,648,715
1876	12,823,838	5,563,487	–	18,614,415	798,906	1,102,540	22,587,587
1877	12,546,988	4,941,898	–	17,697,925	717,684	1,114,946	22,059,274
1878	12,782,824	4,858,672	–	17,841,938	791,758	1,207,790	22,357,011
1879	12,900,659	5,390,763	–	18,476,613	592,500	1,172,418	22,517,382
1880	14,071,343	4,232,428	–	18,479,577	834,793	1,252,498	23,307,407
1881	18,406,092	5,343,022	–	23,942,139	751,513	1,352,110	29,635,298
1882	21,581,570	5,884,860	–	27,549,047	914,009	1,587,888	33,383,456
1883	23,009,582	6,260,117	–	29,269,699	1,001,193	1,800,391	35,794,650
1884	20,023,890	5,459,309	–	25,483,199	986,698	1,755,674	31,861,962
1885	18,935,428	6,449,101	–	25,384,529	1,997,035	1,841,372	32,797,001
1886	19,362,308	5,852,905	–	25,215,213	2,299,079	1,901,690	33,177,040
1887	22,373,951	6,308,201	–	28,682,152	990,887	2,020,624	35,754,993
1888	22,091,682	6,071,487	–	28,163,169	932,025	2,379,242	35,908,464
1889	23,699,413	6,886,739	–	30,586,152	1,305,392	2,220,504	38,782,870
1890	23,913,546	7,618,118	–	31,531,664	1,082,271	2,357,389	39,879,925
1891	23,305,218	6,914,850	–	30,220,068	1,077,228	2,515,823	38,579,311
1892	20,361,382	7,945,098	–	28,306,480	1,086,420	2,652,746	36,921,872
1893	20,910,662	8,367,364	–	29,278,026	1,150,167	2,773,508	38,168,609
1894	19,119,030	8,381,089	–	27,500,119	1,217,809	2,809,341	36,374,693
1895	17,585,741	7,805,733	–	25,391,474	1,336,047	2,792,790	33,978,129
1896	19,766,741	7,926,006	–	27,692,747	1,370,001	2,964,014	36,618,591
1897	19,386,278	9,170,379	–	28,556,657	1,443,004	3,202,938	37,829,778
1898	21,622,789	7,871,563	–	29,494,352	1,513,455	3,527,810	40,555,238
1899	25,150,745	9,641,227	–	34,791,972	1,590,448	3,193,778	46,741,249
1900	28,219,458	9,868,075	–	38,087,533	1,683,051	3,205,535	51,029,994
1901	28,293,930	10,318,266	–	38,612,196	1,784,834	3,441,505	52,514,701
1902	31,916,394	11,197,134	–	43,113,528	1,892,224	3,918,416	58,050,790
1903	36,738,033	12,013,779	–	48,751,812	2,020,953	4,397,833	66,037,069
1904	40,461,591	12,958,708	–	53,420,299	2,236,256	4,652,325	70,669,817
1905	41,437,569	12,586,475	–	54,020,124	2,105,031	5,125,373	71,182,773
1906	46,053,377	14,010,220	–	60,063,597	2,140,312	5,933,343	80,139,360
1907[3]	39,717,079	11,805,413	–	51,522,492	1,235,746	5,061,728	67,969,328
1908	57,200,276	15,782,152	–	72,982,428	1,925,569	7,107,887	96,054,506
1909	47,088,444	14,937,768	–	62,026,212	2,256,643	7,401,624	85,093,404
1910	59,767,681	15,253,353	–	75,021,034	2,807,465	7,958,548	101,503,711
1911	71,838,089	16,869,837	–	88,707,926	1,668,773	9,146,952	117,780,409
1912	85,051,872	19,261,662	–	104,313,534	1,281,317	10,492,394	136,108,217
1913	111,764,699	21,447,445	–	133,212,144	1,430,511	12,051,729	168,689,903
1914	104,691,238	21,452,037	–	126,143,275	1,964,541	12,954,530	163,174,395
1915	75,941,220	21,479,731	98,057	97,519,008	2,980,247	13,046,665	133,073,482
1916	98,649,409	22,428,492	3,620,782	124,666,969	3,358,210	18,858,690	172,147,838
1917	134,043,842	24,412,348	16,302,238	174,758,428	3,094,012	20,902,384	232,701,294
1918	144,172,630	27,168,445	25,379,901	196,720,976	4,466,724	21,345,394	260,778,953
1919	147,169,188	30,342,034	56,177,508	233,688,730	7,421,002	21,603,542	312,946,747
1920	168,796,823	42,698,083	82,079,801	293,574,707	17,086,981	24,471,709	349,746,335
1921	163,266,804	37,118,367	168,385,327	368,770,498	24,815,246	26,706,198	436,292,185[4]
1922	105,686,645	36,755,207	177,484,161	319,926,013	21,961,513	26,402,299	382,271,571[4]
1923	118,056,469	35,761,997	181,634,875	335,453,341	16,465,303	29,016,771	403,094,210[4]
1924	121,500,799	38,181,747	182,036,261	341,718,807	11,916,479	28,865,374	406,582,840[4]
1925	108,146,871	38,603,489	147,164,158	293,914,518	11,332,328	28,782,535	351,515,392[4]
1926	127,355,144	42,923,549	157,296,320	327,575,013	8,535,086	30,334,575	382,893,009[4]
1927	141,968,678	48,513,160	156,167,434	346,649,272	8,559,401	29,069,169	400,452,480[4]
1928	156,985,818	57,400,898	150,319,087	364,705,803	10,937,822	31,562,580	429,642,577[4]
1929	187,206,332	63,684,954	145,029,742	395,921,028	12,227,562	30,611,964	460,151,481[4]
1930	179,429,920	65,035,701	134,086,005	378,551,626	13,518,205	33,345,385	445,916,992[4]
1931	131,208,955	57,746,808	107,320,633	296,276,396	10,421,224	30,212,326	356,160,876[4]
1932	104,132,677	48,654,862	122,297,494	275,085,033	9,330,125	32,234,946	336,721,305[4]

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[1] For detailed statement see Table 8, p. 835.
[2] Includes various smaller items of revenue receipts.
[3] Nine months.
[4] Inclusive of special receipts of $1,905,648 in 1921, $319,184 in 1922, $8,479,310 in 1923, $9,745,158 in 1924, $4,680,913 in 1925, $2,147,503 in 1926, $1,756,704 in 1927, $6,924,594 in 1928, $4,687,607 in 1929, $4,505,186 in 1930, $6,573,577 in 1931 and $7,012,249 in 1932. See Table 2, pp. 826-827.

6.—Per Capita Figures of Taxation, Total Revenue Receipts, Expenditure on Consolidated Fund Account and Total Expenditure, 1868-1932.

Note.—The years marked with an asterisk (*) are those of the censuses, April 2, 1871; April 4, 1881; April 6, 1891; April 1, 1901; June 1, 1911, 1921 and 1931. For the intercensal years the populations are estimated as at June 1 (see p. 145 for estimates of population). The fiscal period of 1907 is nine months ended Mar. 31. See the tables on pp. 829-832 for the figures of revenue and expenditure on which this table is based.

Fiscal Year.	Per Capita Revenue from Taxation.	Per Capita Total Revenue Receipts.	Per Capita Expenditure on Consolidated Fund Acct.	Per Capita Total Disbursements.	Fiscal Year.	Per Capita Revenue from Taxation.	Per Capita Total Revenue Receipts.	Per Capita Expenditure on Consolidated Fund Acct.	Per Capita Total Disbursements.
	$	$	$	$		$	$	$	$
1868.............	3·33	3·90	3·84	4·01	1903.............	8·63	11·69	9·15	10·93
1869.............	3·12	4·03	3·94	4·18	1904.............	9·17	12·13	9·54	12·40
1870.............	3·61	4·28	3·96	4·97	1905.............	9·00	11·86	10·72	13·13
1871*............	4·42	5·24	4·24	5·23	1906.............	9·69	12·93	10·85	13·44
1872.............	4·72	5·52	4·69	6·84	1907.............	8·31	10·97	8·32	10·61
1873.............	4·60	5·44	5·01	10·20	1908.............	11·02	14·50	11·57	16·99
1874.............	5·17	6·21	5·99	8·60	1909.............	9·12	12·51	12·36	19·62
1875.............	5·23	6·23	6·00	8·32	1910.............	10·74	14·53	11·36	16·51
1876.............	4·64	5·63	6·11	7·97	1911*............	12·31	16·34	12·18	17·04
1877.............	4·35	5·43	5·79	8·00	1912.............	14·12	18·42	13·28	18·56
1878.............	4·33	5·43	5·70	7·41	1913.............	17·45	22·10	14·68	18·93
1879.............	4·41	5·38	5·84	7·35	1914.............	16·01	20·71	16·17	23·64
1880.............	4·34	5·48	5·84	8·00	1915.............	12·22	16·67	16·98	31·09
1881*............	5·54	6·85	5·90	7·82	1916.............	15·58	21·52	16·29	42·46
1882.............	6·30	7·63	6·19	7·93	1917.............	21·68	28·87	18·44	61·81
1883.............	6·61	8·08	6·49	9·68	1918.............	24·14	32·00	21·88	70·77
1884.............	5·68	7·10	6·93	12·90	1919.............	28·12	37·65	28·00	83·87
1885.............	5·60	7·23	7·72	10·84	1920.............	34·31	40·88	35·51	91·87
1886.............	5·56	7·31	8·60	13·63	1921*............	41·96	49·64	41·09	60·11
1887.............	6·20	7·73	7·71	8·97	1922.............	35·87	42·86	38·97	51·97
1888.............	6·02	7·68	7·85	9·63	1923.............	37·24	44·74	36·88	48·26
1889.............	6·47	8·20	7·81	9·20	1924.............	37·38	44·47	35·53	40·53
1890.............	6·60	8·34	7·53	8·74	1925.............	31·63	37·83	34·32	37·78
1891*............	6·25	7·98	7·52	8·44	1926.............	34·66	40·52	33·93	37·59
1892.............	5·80	7·56	7·53	8·66	1927.............	35·98	41·56	33·17	37·21
1893.............	5·94	7·74	7·47	8·29	1928.............	37·09	43·69	34·19	38·51
1894.............	5·52	7·31	7·55	8·64	1929.............	39·49	45·89	35·00	38·78
1895.............	5·05	6·76	7·59	8·53	1930.............	37·09	43·69	35·06	39·01
1896.............	5·46	7·22	7·52	8·69	1931*............	28·55	34·32	37·55	42·41
1897.............	5·58	7·39	7·49	8·40	1932.............	26·18	32·05	35·73	42·92
1898.............	5·70	7·84	7·50	8·76					
1899.............	6·65	8·93	8·00	9·85					
1900.............	7·18	9·63	8·11	9·94					
1901*............	7·19	9·78	8·72	10·79					
1902.............	7·85	10·57	9·24	11·64					

7.—Per Capita Revenue Receipts and Expenditure, by Principal Items, 1926-32.

REVENUE RECEIPTS.

NOTE.—See Table 2 on pp. 826-827 for the figures on which this table is based.

Item of Receipts.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Consolidated Fund Receipts—	$	$	$	$	$	$	$
TAXATION—							
Customs	13·48	14·74	15·96	18·67	17·59	12·65	9·92
Excise	4·54	5·04	5·84	6·35	6·37	5·56	4·63
War Tax Revenue—							
Banks	0·12	0·12	0·12	0·12	0·14	0·14	0·13
Trust and loan companies	0·03	0·03	0·04	–	–	–	–
Insurance companies	0·10	0·10	0·10	0·09	–	–	–
Business profits	0·12	0·07	0·10	0·05	0·01	–	–
Income tax	5·88	4·92	5·75	5·92	6·76	6·85	5·83
Sales tax, tax on cheques, transportation tax, etc.	10·39	10·96	9·18	8·29	6·22	3·35	5·67
Totals from Taxation	**34·66**	**35·98**	**37·09**	**39·49**	**37·09**	**28·55**	**26·18**
NON-TAX REVENUE—							
Interest on investments	0·90	0·89	1·11	1·22	1·32	1·00	0·89
Post Office	3·21	3·02	3·21	3·05	3·27	2·91	3·07
Other revenue	1·52	1·49	1·58	1·66	1·57	1·23	1·24
Total Consolidated Fund receipts	40·29	41·38	42·99	45·42	43·25	33·69	31·38
Special receipts	0·23	0·18	0·70	0·47	0·44	0·63	0·67
Grand Totals, Receipts	**40·52**	**41·56**	**43·69**	**45·89**	**43·69**	**34·32**	**32·05**

EXPENDITURE.

NOTE.—See Table 3 on pp. 827-828 for the figures on which this table is based.

Item of Expenditure.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$	$
Agriculture	0·61	0·61	0·66	0·72	0·91	0·88	0·88
Charges on Debt	13·92	13·56	13·20	12·56	12·02	11·78	11·96
Civil Government	1·14	1·13	1·18	1·18	1·20	1·22	1·15
Customs and Excise	1·03	1·05	1·10	1·28	1·29	1·27	1·25
Dominion Lands	0·39	0·44	0·42	0·50	0·54	0·48	0·25
Immigration	0·25	0·24	0·28	0·26	0·27	0·22	0·18
Indians	0·39	0·40	0·43	0·46	0·50	0·57	0·46
Legislation	0·45	0·47	0·21	0·23	0·23	0·45	0·28
National Defence (Militia, Naval and Air Services)	1·33	1·35	1·60	1·79	1·96	2·09	1·60
Pensions	3·94	3·93	4·05	4·14	3·96	4·43	4·63
Post Office	3·23	3·22	3·23	3·34	3·43	3·50	3·28
Public Works, income	1·42	1·16	1·43	1·70	1·78	2·29	1·53
R.C.M. Police	0·22	0·22	0·23	0·26	0·28	0·28	0·31
Soldiers' Civil Re-establishment	0·82	0·72	0·71	0·79	0·83	0·94	1·06
Soldiers' Land Settlement	0·13	0·13	0·14	0·14	0·13	0·13	0·10
Subsidies to Provinces	1·31	1·30	1·27	1·25	1·22	1·68	1·30
Trade and Commerce	0·43	0·38	0·36	0·39	0·42	0·58	0·70
Other Ordinary expenditure	2·92	2·86	3·69	4·01	4·09	4·76	4·81
Totals, Ordinary Expenditure	**33·93**	**33·17**	**34·19**	**35·00**	**35·06**	**37·55**	**35·73**
Special expenditure	0·69	0·81	0·34	0·14	0·95	1·61	5·28
Capital expenditure	1·78	2·03	2·10	2·27	2·21	2·72	1·62
Other Disbursements—							
Advances to railways and Merchant Marine	1·13	1·08	0·10	0·08	0·53	0·18	0·11
Miscellaneous	0·06	0·12	1·78	1·29	0·26	0·35	0·18
Grand Totals, Expenditure	**37·59**	**37·21**	**38·51**	**38·78**	**39·01**	**42·41**	**42·92**

Subsection 3.—War Tax Revenue.

An account of the various war taxes imposed in 1915 and subsequently has already been given on pp. 822-825 in the introduction to this section. For convenience of reference the amounts received from these taxes since the beginning are segregated and the totals paid in to the Receiver-General are given in Table **8**. The taxes imposed on banks, trust and loan companies and insurance companies are collected by the Department of Finance. The excise war taxes, the business profits war tax and the income war tax are collected by the Department of National Revenue, formerly the Customs and Excise Department. The amounts of excise war taxes collected from different sources in the last six fiscal years are given in Table **9**, while Table **10** contains the details by provinces for the latest year. The amounts collected in income war tax and business profits war tax are given by provinces for the two latest fiscal years in Table **11**. (See also Tables **34** to **38** of this chapter.)

8.—War Tax Revenue Received by the Receiver-General, fiscal years ended Mar. 31, 1915-32.

Year.	Banks.	Trust and Loan Companies.	Insurance Companies.	Business Profits.[3]	Income Tax.	Customs and Excise.[1]	Total War Tax Revenue.
	$	$	$	$	$	$	$
1915	–	–	–	–	–	98,057	98,057
1916	1,300,447	324,250	459,247	–	–	1,536,838	3,620,782
1917	1,114.023	202,415	419,699	12,506,517	–	2,059,584	16,302,238
1918	1,115,758	269,129	496,540	21,271,084	–	2,227,390	25,379,901
1919	1,099,764	323,340	546,114	32,970,062	9,349,720	11,888,508	56,177,508
1920	1,170.223	274,216	638,731	44,145,184	20,263,740	15,587,707	82,079,801
1921	1,257,534	293,802	807,667	40,841,401	46,381,824	78,803,099	168,385,327
1922	1,293,697	283,994	749,959	22,815,667	78,684,355	73,656,489	177,484,161
1923	1,244.437	312,392	852,328	13,031,462	59,711,538	106,482,718	181,634,875
1924	1,236.957	308,632	857,587	4,752,681	54,204,028	120,676,376	182,036,261
1925	1,217,754	315,315	867,902	2,704,427	56,248,043	85,810,717	147,164,158
1926	1,176,869	326,714	950,221	1,173,449	55,571,962	98,097,106	157,296,321
1927	1,174,665	335,368	947,830	710,102	47,386,309	105,613,160	156,167,434
1928	1,224,645	345,430	999,003	956.031	56,571,047	90,222,931	150,319,087
1929	1,242.399	7,641	894,864	455,232	59,422,323	83,007,283	145,029,742
1930	1,408,420	−626[2]	74,416	173,300	69,020,726	63,409,143	134,085,379
1931	1,429,264	6	74,250	34,430	71,048,022	34,734,661	107,320,633
1932	1,390,121	–	12,152	3,000	61,254,400	59,606,391	122,266,064
Totals	**21,096,977**	**3,922,018**	**10,648,510**	**198,544,029**	**745,118,037**	**1,033,518,158**	**2,012,847,729**

[1] Amounts paid in to Receiver-General.

[2] There were refunds in excess of revenue of $626 for 1930.

[3] Although this tax was not charged upon profits accruing after Dec. 31, 1920 (see 14-15 Geo. V, c. 10), belated revenue therefrom continued to be received up till 1932.

9.—Summary of Excise War Taxes Collected by the Department of National Revenue, (formerly the Department of Customs and Excise), fiscal years ended Mar. 31, 1927-32.

(Accrued Revenue.)

Item.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Licences	37,036	35,839	38,690	44,530	38,339	37,127
Stamps	8,880,517	4,411.086	3,867,810	5,559,844	3,609,180	2,852,913
Matches	2,874,728	2,148,431	1,502,395	1,794,556	1,838,232	1,949,470
Automobiles	2,208,582	838,286	1,025,661	742,471	398,444	332,668
Playing cards	286,022	224,860	268,752	291,184	290,035	276,528
Cigars	311,701	320,627	328,764	329,217	256,551	217,938
Wines	118,080	170,987	211,717	299,466	262,225	258,061
Ale, beer and porter	5,198,503	6,320,590	7,953,133	7,475,125	6,541,366	6,297,859
Beverages and carbonic acid gas	27,550	–	–	–	–	–
Transportation	2,452,780	2,534,982	2,647,801	650,172	204	–
Embossed cheques	368,238	174,353	13,276	3,973	790	–
Embossed cheques (Departmental)	76,521	174,957	195,201	186,240	187,337	194.372
Penalties and interest	–	146,783	183,934	169.452	278.577	219,032
Sales, domestic	63,940,130	55,379,084	49,151,636	34,936,376	16,586,976	34,557,788
Domestic Totals	**86,780,388**	**72,880,865**	**67,388,770**	**52,482,606**	**30,288,256**	**47,193,756**
Importations—						
Sales	18,365,540	16,721,160	14,495,036	9,922,325	4,196,929	7,834,822
Excise	1,577,400	2,060,061	2,130,360	1,748,665	886,681	253,505
Special excise 1 p.c.	–	–	–	–	–	4,982,217

10.—Excise War Taxes Collected by the Department of National Revenue, by Provinces, fiscal year ended Mar. 31, 1932.

(Accrued Revenue.)

Province.	Licences.	Stamps.	Matches.	Automobiles.	Sales.
	$	$	$	$	$
Prince Edward Island	276	9,435	–	–	16,276
Nova Scotia	1,082	80,799	–	368	523,673
New Brunswick	1,044	56,604	–	1,018	402,646
Quebec	10,394	868,873	1,022,824	33,381	12,332,502
Ontario	16,812	1,208,507	926,646	295,492	18,554,902
Manitoba	1,342	144,240	–	548	958,367
Saskatchewan	389	119,235	–	–	172,391
Alberta	1,170	149;540	–	328	416,211
British Columbia	4,616	195,580	–	1,533	1,180,723
Yukon	2	825	–	–	97
Departmental Sales	–	19,275	–	–	–
Totals	**37,127**	**2,852,913**	**1,949,470**	**332,668**	**34,557,788**

Province.	Playing Cards.	Cigars.	Wines.	Beer.	Embossed Cheques.
	$	$	$	$	$
Prince Edward Island	–	–	–	–	–
Nova Scotia	–	67	–	131,912	–
New Brunswick	–	–	–	32,062	–
Quebec	93,528	116,993	–	3,383,906	36
Ontario	183,000	98,668	248,044	1,464,609	384
Manitoba	–	–	161	355,706	47
Saskatchewan	–	–	–	163,068	5
Alberta	–	179	–	359,869	34
British Columbia	–	2,031	9,856	406,727	77
Yukon	–	–	–	–	–
Departmental Sales	–	–	–	–	193,789
Totals	**276,528**	**217,938**	**258,061**	**6,297,859**	**194,372**

Province.	Penalties and Interest.	Domestic Total.	Importations.			Grand Total.
			Sales.	Excise.	Special Excise, 1 p.c.	
	$	$	$	$	$	$
Prince Edward Island	5	25,992	12,260	2,008	5,353	45,613
Nova Scotia	1,495	739,396	194,267	13,974	151,909	1,099,546
New Brunswick	4,578	497,952	211,906	8,235	119,718	837,812
Quebec	88,645	17,951,083	2,246,859	61,512	1,528,810	21,788,264
Ontario	97,097	23,094,161	3,330,467	110,024	2,431,930	28,966,582
Manitoba	2,670	1,463,080	507,052	23,644	185,956	2,179,731
Saskatchewan	979	456,067	119,719	1,334	46,078	623,199
Alberta	2,442	929,773	231,319	3,993	81,556	1,246,640
British Columbia	21,121	1,822,264	972,422	28,177	428,609	3,251,472
Yukon	–	924	8,189	604	2,298	12,015
Departmental Sales	–	213,064	–	–	–	213,064
British Post Office Parcels	–	–	362	–	–	362
Totals	**219,032**	**47,193,756**	**7,834,822**	**253,505**	**4,982,217**	**60,264,300**

11.—Amounts Collected under the Income War Tax Act and the Business Profits War Tax Act, by Provinces, fiscal years ended Mar. 31, 1931 and 1932.

Province.	1931.			1932.		
	Income War Tax.	Business Profits War Tax.	Total.	Income War Tax.	Business Profits War Tax.	Total.
	$	$	$	$	$	$
Prince Edward Island	45,671	–	45,671	40,930	–	40,930
Nova Scotia	666,009	–22	665,987	833,836	–	833,836
New Brunswick	612,947	–	612,947	530,852	–	530,852
Quebec	23,087,571	5,497	23,093,068	20,671,026	3,000	20,674,026
Ontario	34,713,871	26,655	34,740,526	30,268,306	–	30,268,306
Manitoba	3,537,771	–	3,537,771	2,232,348	–	2,232,348
Saskatchewan	932,954	–	932,954	403,481	–	403,481
Alberta	2,316,043	2,300	2,318,343	1,853,848	–	1,853,848
British Columbia	5,106,454	–	5,106,454	4,403,853	–	4,403,853
Yukon	19,034	–	19,034	10,360	–	10,360
Head Office	9,697	–	9,697	5,560	–	5,560
Totals	**71,048,022**	**34,430**	**71,082,452**	**61,254,400**	**3,000**	**61,257,400**

Subsection 4.—Inland Revenue.

Under the Inland Revenue Act (R.S.C., 1906, c. 5), the Department of Inland Revenue had the control and management of standard weights and measures and of the collection of excise duties, of stamp duties, internal taxes, bridge and ferry tolls and rents until 1918. It administered the Statutes which dealt with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha and the analysis of fertilizers and feeding stuffs. This Department also established the food standards, which were put into force by Orders in Council under the authority of section 26 of the Adulteration Act. By Order in Council dated May 18, 1918, the Department of Customs and the Department of Inland Revenue were amalgamated and combined under the name of the Department of Customs and Inland Revenue, under one Minister of the Crown. By Order in Council dated June 3, 1918, the administration of the Gas, Electric Light, and Weights and Measures Inspection Acts, the Adulteration of Food, Commercial Feeding Stuffs, Fertilizers, Proprietary and Patent Medicine, and Inspection of Water Meters Acts was transferred to the Department of Trade and Commerce, as from Sept. 1, 1918. On June 4, 1921, the Department of Customs and Inland Revenue was consolidated as the Department of Customs and Excise (11-12 George V, c. 26). As from April 1, 1927, the name of this Department, which collects the great bulk of the revenue of the Dominion, was changed to Department of National Revenue by authority of 17 Geo. V, c. 34. This Act provides for three chief departmental officers—the Commissioner of Customs, the Commissioner of Excise and the Commissioner of Income Tax, while an Assistant Commissioner of Customs may also be appointed.

In the fiscal year ended Mar. 31, 1932, the gross amount of customs duties collected by the Department was $113,997,851, as compared with $149,250,992 in 1931, $199,011,628 in 1930, $200,479,505 in 1929, $171,872,768 in 1928 and $158,966,367 in 1927. The total of excise duties and excise war taxes collected in the fiscal year ended Mar. 31, 1932, was $109,586,366, as compared with $93,986,975 in 1931, $129,822,444 in 1930 and $148,376,494 in 1929. The total of income tax collected in the fiscal year ended Mar. 31, 1931, was $71,048,022, and of business profits war tax $34,430, and in the fiscal year ended Mar. 31, 1932, the total of income tax collected was $61,254,400 and of business profits war tax $3,000. While the income tax and the business profits war tax (see Table **11**) are collected by the Commissioner of Income Tax, the other main branches of inland revenue—the excise duties and excise war taxes—are collected by the Commissioner of Excise.

Canadian Excise Tariff.—The following is a statement of the Canadian excise tariff, as existing at July 1, 1932:—

Spirits—	
When made from raw grain, per proof gal.	$ 9·00[1]
When made from malted barley "	9·02[1]
When made from imported molasses or other sweetened matter free of customs duty, per proof gal.	9·03[1]
Malt, screened, per lb.	0·03
Malt, imported, crushed or ground, per lb.	0·05
Malt liquor, when made in whole or part from any other substance than malt, per gal.	0·15

Tobacco, per lb.	$ 0·20
Cigarettes, weighing not more than 3 lb. per thousand, per thousand	6·00[1]
Cigarettes, weighing more than 3 lb. per thousand, per thousand	11·00
Foreign raw leaf tobacco, unstemmed, per standard lb.	0·40
Foreign raw leaf tobacco, stemmed, per standard lb.	0·60
Canada Twist tobacco, per lb.	0·20
Snuff, per lb.	0·20
Cigars, per thousand	3·00

When, however, any person is licensed by the Minister of National Revenue to manufacture patent and proprietary medicines, extracts, essences and pharmaceutical preparations by the use of spirits in bond, subject to the Excise Act and Regulations thereunder, the following duties of excise are collected: when made from raw grain, $2.40 per proof gallon; when made from malted barley, $2.42 per proof gallon; when made from imported molasses or other sweetened matter free of customs duty, $2.43 per proof gallon. Druggists, licensed by the Minister of National Revenue to prepare prescriptions for medicines and pharmaceutical preparations, are also allowed to use limited quantities of spirits, testing not less than 50 p.c. over proof, on payment of the above lower manufacturers' rates of duty. A drawback of 99 p.c. of the duty may be granted when domestic spirits, testing not less than 50 p.c. over proof, are delivered in limited quantities to universities, scientific or research laboratories, or to hospitals for medicinal purposes only.

Revenue from Excise Duties.—The inland revenue collected from excise duties, other than war taxes, is shown by items for the last six fiscal years in Table **12**. Tobacco, including cigarettes, is shown by the figures to be supplying about 71 p.c. of the revenue from excise duties.

12.—Details of Excise Duties Collected, fiscal years ended Mar. 31, 1927-32.

(Accrued revenues as shown in the Report of the Commissioner of Excise.)

Item.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Spirits	13,904,584	18,267,537	19,344,599	18,534,658	11,821,701	8,160,573
Malt liquor	223,833	239,245	351,440	347,648	388,827	389,736
Malt	3,811,557	4,277,066	4,756,945	4,495,651	4,140,360	3,634,888
Tobacco	30,638,418	34,702,359	39,307,618	41,671,417	41,701,767	36,650,559
Cigars	536,845	549,896	576,883	593,052	537,315	460,504
Acetic acid	150	150	150	150	200	100
Manufactures in bond	17,350	17,700	17,020	17,950	17,150	17,300
Other receipts	7,176	8,170	7,673	8,322	7,749	8,405
Totals	**49,139,913**	**58,062,123**	**64,362,328**	**65,668,848**	**58,615,069**	**49,322,065**

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[1] Following the Imperial Economic Conference, 1932, amendments to the Excise Act, assented to on Nov. 25, 1932, were made as follows:—

(1) The duty on domestic spirits entered for consumption was reduced from $9, $9.02, and $9.03 per proof gallon to $7 per proof gallon.

(2) The duty on manufactured cigarettes entered for consumption was reduced from $6 per thousand to $4 per thousand.

Statistics of Licences and Distillation.—As a by-product of the collection of excise duties, statistics are compiled of excise licences issued and of distillation; figures for recent years are given in Tables **13** and **14**.

13.—Number of Excise Licences Issued, fiscal years ended Mar. 31, 1926-32.

Description.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.
Distillers	18	20	23	25	28	27	27
Brewers and maltsters	87	93	93	95	94	98	92
Tobacco manufacturers	65	56	58	57	56	56	60
Cigar manufacturers	110	106	90	83	82	76	79
Petroleum refiners	21	21	22	21	22	22	27
Manufacturers in Bond—							
Perfumes, pharmaceutical preparations, etc.	343	345	346	330	338	337	337
Chemical stills	156	151	152	144	135	133	141
Wood alcohol manufacturers	8	6	6	6	8	6	6
Malt vinegar brewers	3	3	3	4	4	5	5
Still manufacturers and importers	18	24	26	24	29	26	23
Acetic acid manufacturers	2	3	3	3	3	3	–
Bonded warehouses	41	42	62	51	49	48	62
Rectifiers	1	–	–	–	–	–	–
Compounders	2	3	3	4	6	6	6
Canadian leaf stemmers	–	8	9	10	10	9	14

14.—Statistics of Distillation, fiscal years ended March 31, 1927-32.

Schedule.	1927.	1928.	1929.	1930.	1931.	1932.
Licences issued . . . No.	20	23	25	28	27	27
Licence fees . . . $	5,000	6,125	6,625	7,750	6,125	7,125
Grain, etc., for Distillation—						
Malt . . . lb.	12,650,807	25,116,100	39,170,372	42,064,219	19,519,949	10,802,254
Indian corn . . . "	62,478,906	78,871,584	106,112,316	114,942,991	35,879,402	19,657,775
Rye . . . "	21,129,081	53,617,695	80,449,536	78,075,195	47,421,646	27,121,120
Oats and other grain . . "	283,950	139,184	228,102	257,510	64,150	189,080
Wheat . . . "	1,616,020	249,660	–	–	–	–
Rice . . . "	–	–	84,523	58,330	–	–
Totals, grain used . . . "	98,158,764	157,994,223	226,044,849	235,398,245	102,885,147	57,770,229
Molasses used . . . "	68,847,431	49,801,495	78,099,601	61,036,607	70,304,701	71,988,200
Wine and other materials lb.	–	–	–	–	–	15,917,061
Proof spirits manufactured . . . proof gal.	9,121,051	11,596,200	16,816,312	16,813,433	9,286,780	7,099,637
Duty Collected Ex-manufactory on Deficiencies and Assessment—						
Amount . . . proof gal.	1,585	3,817	131	312	965	9,643
Value . . . $	14,272	34,422	1,178	2,813	8,677	87,061
Totals, duty collected plus licence fees . . . $	19,272	40,547	7,803	10,563	14,802	94,186

Alcohol and Tobacco Taken out of Bond.—In Table **15** are shown the quantities of spirits, malt liquor, malt, cigars, cigarettes and tobacco taken out of bond for consumption in the fiscal years ended 1901 to 1932.

Between 1920 and 1932 the number of cigars taken out of bond fell from 270,089,761 to 152,159,301 and the quantity of tobacco, which was 23,049,012 lb. in 1920, had fallen to 20,870,651 lb. by 1925, since when there has been a steady increase to 22,801,035 lb. in 1932. The consumption of cigarettes increased from 2,440,982,912 in 1920 to 5,082,314,590 in 1931 but declined to 4,401,628,765 in 1932.

Between 1923 and 1929 spirits taken out of bond (exclusive of imported spirits) rose from 729,678 gal. to 2,016,802 gal., but there has been a decided and steady drop since 1929 to 781,612 gal. for 1932. Malt liquor shows an increase from 36,789,195 gal. in 1923 to 65,719,129 gal. in 1929 and a corresponding decrease to 52,001,768 gal. in 1932.

15.—Quantities of Spirits, Malt Liquor, Malt and Tobacco Taken Out of Bond for Consumption, fiscal years ended June 30, 1901-6, and Mar. 31, 1907-32.

(For earlier years see 1916-17 Year Book, p. 528.)

Fiscal Year.	Spirits.[1]	Malt Liquor.	Malt.	Cigars.	Cigarettes.	Tobacco.[3]
	gal.	gal.	lb.	No.	No.	lb.
1901	2,707,919	25,108,254	64,723,616	141,096,889	121,383,584	11,330,345
1902	2,933,183	27,623,767	71,440,519	151,780,516	134,236,034	11,569,632
1903	2,979,268	25,755,154	67,608,157	168,290,422	176,435,240	12,507,944
1904	3,481,287	27,335,985	75,430,347	180,485,202	211,302,041	12,574,524
1905	3,112,843	30,330,370	75,517,352	186,110,777	250,860,387	13,444,611
1906	3,545,785	33,250,637	85,699,102	193,827,342	269,334,939	14,517,911
1907[2]	3,033,439	26,505,831	69,176,871	154,253,260	266,377,710	11,318,538
1908	3,918,657	38,800,380	98,579,733	200,133,255	384,809,344	15,971,609
1909	3,627,266	37,317,964	92,631,306	192,105,371	356,756,130	17,217,710
1910	3,777,156	38,558,210	95,166,134	205,820,851	451,095,138	17,961,279
1911	4,146,452	41,752,448	101,525,430	227,585,692	585,935,370	18,903,322
1912	4,562,382	47,518,647	114,029,523	252,718,242	782,663,841	21,419,046
1913	4,999,937	52,314,400	123,920,607	294,772,933	977,743,301	22,371,636
1914	4,762,618	56,060,846	133,794,639	288,219,892	1,166,023,170	22,248,760
1915	4,021,090	47,963,225	111,037,743	236,866,542	1,090,125,936	21,180,857
1916	3,629,324	39,638,877	89,476,590	207,647,808	1,082,324,710	20,698,241
1917	4,118,147	34,827,284	78,815,746	239,752,252	1,307,276,750	20,735,080
1918	4,591,972	28,442,427	59,626,049	254,445,945	1,664,709,933	21,780,168
1919	2,941,108	26,024,117	49,184,747	221,087,110	1,553,468,890	19,980,446
1920	3,816,124	36,863,867	69,975,631	270,089,761	2,440,982,912	23,049,012
1921	2,816,071	35,509,757	82,210,351	214,262,197	2,439,832,278	19,389,268
1922	730,474	38,404,346	87,561,176	181,255,533	2,450,397,154	20,528,228
1923	729,678	36,789,195	84,922,024	183,965,151	1,917,773,908	22,072,709
1924	899,291	43,717,823	105,446,169	198,042,909	2,420,052,731	21,172,307
1925	910,316	48,106,177	118,237,385	168,097,387	2,531,693,150	20,870,651
1926	1,082,785	52,443,505	127,789,729	174,363,188	2,883,448,160	21,595,483
1927	1,404,111	51,726,251	126,967,976	175,335,838	3,333,999,860	21,589,772
1928	1,896,357	58,391,360	142,543,947	181,730,614	3,927,022,325	21,907,747
1929	2,016,802	65,719,129	158,490,019	190,981,166	4,607,500,425	21,973,221
1930	1,926,063	62,992,156	149,746,711	196,251,957	5,035,878,655	22,195,455
1931	1,180,536	58,641,404	137,997,652	177,841,987	5,082,314,590	22,520,345
1932	781,612	52,001,768	121,257,234	152,159,301	4,401,628,765	22,801,035

[1] Exclusive of imported spirits. [2] Nine months. [3] Including snuff.

Subsection 5.—Provincial Subsidies.

Tables **16** and **17** show the subsidies and other payments made by the Dominion to each of the Provincial Governments for the individual fiscal years ended from 1927 to 1932 (Table **16**), and the totals paid from Confederation to 1932 (Table **17**). The provincial subsidies payable by the Dominion Government were originally settled by the British North America Act, 1867 (30 and 31 Vict., c. 3, s. 118), but were revised by the British North America Act, 1907 (7 Edw. VII, c. 11). Under the revised settlement each Provincial Government receives: (a) a fixed grant according to population and (b) a grant at the rate of 80 cents per head of the population up to 2,500,000, and at the rate of 60 cents per head of so much of the population as exceeds that number. The province of British Columbia received an additional grant of $100,000 per annum for a period of 10 years from 1907.[1] An additional grant of $100,000 per annum is payable to Prince Edward Island under an Act of 1912 (2 Geo. V, c. 42), and the payments to Manitoba were revised by the Extension of Boundaries (Manitoba) Act, 1912 (2 Geo. V, c. 32); in 1931 an amount of $4,822,843 was paid as a readjustment in lieu of public lands from 1870 to 1908 as provided for in the Manitoba Natural Resources Act, 1930. Other payments to the Provincial Governments by the Dominion Government consist of special grants, such as compensation for lands, allowances for buildings, allowances in lieu of debt, etc.

16.—Subsidies of Dominion to Provincial Governments, fiscal years ended 1927-32.

Province.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Prince Edward Island	381,932	381,932[1]	381,932[1]	381,932[1]	381,932[1]	381,932[1]
Nova Scotia	661,841	661,841[1]	661,841[1]	661,841[1]	661,841[1]	661,841[1]
New Brunswick	666,766	666,766[1]	666,766[1]	666,766[1]	666,766[1]	693,040[1]
Quebec	2,256,420	2,256,420	2,256,420	2,256,420	2,256,420	2,592,014
Ontario	2,642,612	2,642,612	2,642,612	2,642,612	2,642,612	2,941,425
Manitoba	1,491,836	1,491,836	1,500,214	1,508,591	6,478,619[2]	1,694,195
Saskatchewan	2,032,575	2,032,575	2,047,935	2,063,295	1,938,295	2,112,803
Alberta	1,643,942	1,643,942	1,657,188	1,576,685	1,670,435	1,743,159
British Columbia	738,816	738,816	738,817	738,817	738,817	874,561
Totals	**12,516,740**	**12,516,740**	**12,553,725**	**12,496,959**	**17,435,738**	**13,694,970**

[1] For the years 1928, 1929, 1930, 1931 and 1932, special grants, pending reconsideration of provincial subsidies, were granted to Nova Scotia, New Brunswick and Prince Edward Island as follows: Nova Scotia $875,000, New Brunswick $600,000, Prince Edward Island $125,000.

[2] $4,822,843 of this amount was on account of readjustment of subsidy in lieu of Public Lands from 1870 to 1908, as provided for in the Manitoba Natural Resources Act, 1930.

17.—Total of Subsidy Allowances from July 1, 1867 to Mar. 31, 1932.

Province.	Allowances for Government.	Allowances on basis of Population.	Special Grants.[1]	Interest on Debt Allowances.[2]	Total.
Prince Edward Island	3,520,000	5,059,917	4,352,545	2,486,477	15,409,938
Nova Scotia	7,150,000	22,500,248	826,980	3,077,168	33,554,397
New Brunswick	6,510,000	17,124,926	9,480,000	1,344,705	34,459,631
Quebec	8,800,000	77,982,427	–	4,941,871	91,724,297
Ontario	9,200,000	96,960,968	–	4,601,275	110,762,243
Manitoba	6,355,000	15,617,218	18,769,233	12,587,451	53,328,902
Saskatchewan	5,056,667	13,812,672	15,531,259	10,945,125	45,345,713
Alberta	4,776,667	10,760,917	13,968,750	10,945,125	40,451,458
British Columbia	5,750,000	11,066,546	7,100,000	1,787,999	25,704,545
Totals	**57,118,334**	**270,876,839**	**70,028,757**	**52,717,196**	**450,741,126**

[1] Compensation for lands and allowances for buildings. [2] Allowances in lieu of debt.

Subsection 6.—National Debt.

The gross national debt of Canada on Mar. 31, 1914, was $544,391,369, as against assets of $208,394,519, leaving a net debt of $335,996,850. Comparatively small as was this debt, it was a debt incurred almost altogether either for public works of general utility which, like the Intercolonial and transcontinental railways and the canal system, remained assets, though perhaps not realizable assets of the nation, or was expended as subsidies to enterprises, which, like the Canadian Pacific Railway, though not government-owned, assisted greatly in extending the area of settlement as well as the productive and, therefore, the taxable capacity of the country. Broadly speaking, it was a debt incurred for productive purposes. Also, it was mainly held outside the country, the principal of the Dominion funded debt payable in London being $302,842,485 on Mar. 31, 1914, as against only $717,453 payable in Canada.

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[1] See Canada Year Book, 1907, pp. xxiii–iv.

The great changes brought about in our national debt during the 18 years from 1914 to 1932 have been: (1) the enormous increase in net debt from $335,996,850 to $2,375,846,172; (2) the gross debt, having been largely incurred for war purposes, is not represented by corresponding assets; (3) the debt is now mainly held in Canada, $2,012,210,212 being payable in Canada at Mar. 31, 1932; (4) the average rate of interest paid on interest-bearing debt has been considerably increased.

A summary account of the loans effected between 1914 and Dec. 31, 1932, follows.

War and Renewal Loans.—The first Dominion domestic war loan was raised in November, 1915, under authority of c. 23 of the Statutes of that year (5 Geo. V, c. 23). It originally consisted of $50,000,000 5 p.c. tax-exempt 10-year gold bonds, issued at 97½ and maturing Dec. 1, 1925. As the issue was heavily over-subscribed (public subscriptions by 24,862 subscribers $78,729,500, bank subscriptions $25,000,000) and the extra money was needed, the Government increased the amount of the loan to $100,000,000. In July, 1915, $25,000,000 of 1-year and $20,000,000 of 2-year 5 p.c. notes had been floated in the United States, with the object of stabilizing exchange and relieving the pressure on London.

In September, 1916, the second Canadian domestic war loan of $100,000,000 5 p.c. tax-exempt 15-year gold bonds was issued and again over-subscribed (public subscriptions by 34,526 subscribers $151,444,800, bank subscriptions $50,000,000). In March of that year, a loan of $75,000,000 in 5-, 10-, and 15-year 5 p.c. bonds had been floated in New York.

The third Canadian domestic war loan, composed of $150,000,000 5 p.c. tax-exempt 20-year gold bonds, was issued at 96 in March, 1917, and was again over-subscribed, 40,800 public subscribers applying for $200,768,000, while the banks subscribed $60,000,000. In August, 1917, $100,000,000 of 5 p.c. 2-year notes were issued in New York at 98.

The fourth domestic war loan (First Victory Loan) was issued in November 1917. For the first time subscriptions as low as $50 were received towards an issue of $150,000,000 5½ p.c. 5-, 10-, and 20-year gold bonds, the Minister of Finance reserving the right to allot the whole or any part of the amount subscribed in excess of $150,000,000. The subscribers numbered 820,035 and the subscriptions totalled $398,000,000, or about $50 per head of the then population of Canada.

The fifth domestic war loan (Second Victory Loan) of $300,000,000 5½ p.c. 5- and 15-year tax-exempt gold bonds, was issued at 100 and interest as of date Nov. 1, 1918; the end of the War, then clearly in sight, stimulated subscriptions. The applications numbered 1,067,879 and subscriptions totalled $660,000,000.

The sixth domestic war loan (Third Victory Loan) was raised at 100 and interest in November, 1919. It consisted of $300,000,000 *taxable* 5-year and 15-year 5½ p.c. gold bonds. The subscriptions amounted to $678,000,000.

A 5½ p.c. renewal loan, aggregating $114,464,150 and due in 1927 and 1932, was floated in Canada in the autumn of 1922 to pay off the maturing 5-year Victory Loan bonds of 1917. Largely for the same purpose, a $100,000,000 5 p.c. loan was issued in New York.

In the autumn of 1923, a refunding loan of $20,000,000 at 5 p.c. was issued in Canada to pay off the maturing 5-year Victory Loan bonds of 1918.

Refunding operations in 1924, to retire $107,955,650 5-year Victory bonds, issued in 1919, and to redeem treasury bills held by banks, took the form of a domestic issue of $50,000,000 4½ p.c. 20-year bonds and $35,000,000 4 p.c. 2-year notes, and a short term issue in the New York market of $90,000,000 4 p.c. 1-year treasury notes. An issue of $24,000,000 in 4 p.c. 1-, 2- and 3-year notes ($8,000,000 of each) was also made in November, 1924.

A refunding loan of $75,000,000 at 4½ p.c. due 1940 was issued in Canada in September, 1925, also 4 p.c. 1-year notes amounting to $70,000,000 in New York. Securities redeemed included £5,000,000 4½ p.c. bonds due in London, $90,000,000 4 p.c. notes due in New York, also $8,000,000 4 p.c. notes and $42,014,500 5 p.c. bonds of the 1915 war loan due in Canada.

In 1926, refunding issues dated Feb. 1, were made as follows: In Canada, $20,000,000 4½ p.c. 4-year bonds and $45,000,000 4½ p.c. 20-year bonds; in New York, $40,000,000 4½ p.c. 10-year bonds. Maturing securities included $25,000,000 5 p.c. bonds due in New York April 1, and $70,000,000 4 p.c. notes called for redemption April 1.

In 1927, $45,000,000 of 4 p.c. treasury notes due Dec. 1, 1930, were issued in order to retire maturing 5½ p.c. obligations.

In 1930, $45,000,000 3-year 4 p.c. treasury notes, issued on Dec. 1, 1927, matured, and were replaced by the issue of 2-year treasury notes for $40,000,000 at 4 p.c. maturing Dec. 1, 1932, the balance of $5,000,000 being paid from cash. These were sold at par to Canadian chartered banks. On Oct. 1, 1930, a 4 p.c. loan of $100,000,000 maturing Oct. 1, 1960, was issued in New York. It was sold at a price of 93·646, or at a cost of 4·38 p.c. per annum. Principal and interest are payable in New York funds.

In 1931, extensive conversion and other operations in connection with the national debt were carried out as follows:

On April 1, 1931, the 5 p.c. Public Service Loan of $25,000,000 fell due in New York and was redeemed out of the proceeds of the loan negotiated in New York in the previous October, effecting a net annual saving in interest of $155,000.

In May, a conversion offer was made in connection with the $1,084,823,350 of funded debt maturing between then and Nov. 1, 1934. The opening offer was to convert $250,000,000, the Minister of Finance reserving the right to increase the amount at any time before May 23. The basis was an exchange of a bond of any of the following four maturities for new twenty-five-year 4½ p.c. bonds, dating from the maturity of the old bonds; the 5 p.c. bonds maturing Oct. 1, 1931, or the 5½ p.c. bonds maturing Nov. 1, 1932, 1933 and 1934, respectively. One of the terms of the new bonds was that at any time after fifteen years the Dominion, on giving sixty days' notice, had the right to call any series for redemption. There was attached to each of the new bonds one or more talons representing the difference in interest to maturity of the former series. Tax exemption privileges limited to the maturity date of the old bonds were continued to holders of tax-exempt bonds offered for conversion. The amount was oversubscribed more than two and a half times, the conversions being: 5 p.c. War Loan maturing Oct. 1, 1931, $38,625,700; 5½ p.c. Renewal Loan maturing Nov. 1, 1932, $37,523,200; 5½ p.c. Victory Loan maturing Nov. 1, 1933, $276,688,100; 5½ p.c. Victory Loan maturing Nov. 1, 1934, $285,772,300; total, $638,609,300. The saving in interest in the fiscal year under review was $193,128. When the full benefit of the conversion is secured, after Nov. 1, 1934, the annual saving will be $6,192,964.

The non-converted part of the Oct. 1 maturity amounted to $14,303,900, of which $1,211,300 was held in sinking fund account, leaving approximately $13,100,000 to re-finance. The necessary funds were provided through accepted tenders, at par, for $4,500,000 from insurance companies and an arrangement with the Bank of Montreal, whereby that institution took, at par, the residue of the issue, the Government undertaking to redeem out of the proceeds of the public offering when made.

In November, a public offering of $150,000,000 5 p.c. bonds was made. The loan was named "Dominion of Canada National Service Loan, 1931". The bonds were offered for public subscription in two maturities; one for five years, the price being 99·25; one for ten years at 99, or on a yield basis of 5·17 p.c. and 5·13 p.c. respectively. The loan was over-subscribed, the books being closed twelve days before the advertised closing date. Subscriptions totalled $221,198,200, the division being $79,535,200 maturing in 1936; $141,663,000 maturing in 1941.

In 1932-33, one-year 4 p.c. treasury notes to the amount of $60,000,000 dated Oct. 1 were sold in New York at 99·28. In Canada, $85,000,000 of 4½ p.c. one-year treasury notes dated Aug. 1, 1932, and $35,000,000 of 4 p.c. 2-year treasury notes dated Nov. 1, 1932, were sold at par to the chartered banks. Further, $25,000,000 of 3-year 4 p.c. bonds and $56,191,000 of 20-year 4 p.c. bonds dated Oct. 15, were sold to the public, the 3-year bonds being sold at 99·20 to yield 4·28 p.c. and the 20-year bonds at 93·45 to yield 4½ p.c.

Summary statistics of the national debt of Canada as at Confederation and at the end of each fiscal year thereafter down to 1932 are given in Table **18**, while details of the active assets and of the gross liabilities as at the end of the last twelve fiscal years are given in Tables **19** and **20** respectively. Further, details of the funded debt, showing the various issues of bonds, the annual interest charge and the place at which principal and interest is payable, are given as at Mar. 31, 1932, in Table **21**. From this it appears that the net total payable in London at that date was $249,677,848 with interest charge of $11,144,780, in New York $240,971,700 with interest charge of $10,843,700, and in Canada $2,012,210,212 with interest charge of $105,614,947. Thus more than 80 p.c. of the funded debt of the Dominion was due within the Dominion itself, and as a consequence the interest payable outside of Canada was a comparatively small item.

18.—Summary of the Public Debt of Canada and Interest Payments Thereon, July 1, 1867 to Mar. 31, 1932.

Fiscal Yr.	Gross Debt.	Total Assets.	Net Debt.	Net Debt per capita.[7]	Increase or Decrease of Debt during the Year.[1]	Interest Paid on Debt.	Interest Received from Active Assets.	Interest Paid per capita.[7]
	$	$	$	$	$	$	$	$
1867.	93,046,052	17,317,410	75,728,642	21·87	-	-	-	-
1868.	96,896,666	21,139,531	75,757,135	21·58	28,493	4,501,568	126,420	1·28
1869.	112,361,998	36,502,679	75,859,319	21·28	102,184	4,907,014	313,021	1·38
1870.	115,993,706	37,783,964	78,209,742	21·58	2,350,423	5,047,054	383,956	1·39
1871.	115,492,683	37,786,165	77,706,518	21·06	—503,225	5,165,304	554,384	1·40
1872.	122,400,179	40,213,107	82,187,072	21·89	4,480,554	5,257,231	488,042	1·40
1873.	129,743,432	29,894,970	99,848,462	26·10	17,661,390	5,209,206	396,404	1·36
1874.	141,163,551	32,838,587	108,324,964	27·81	8,476,502	5,724,436	610,863	1·47
1875.	151,663,402	35,655,024	116,008,378	29·34	7,683,414	6,590,790	840,887	1·67
1876.	161,204,688	36,653,174	124,551,514	31·07	8,543,136	6,400,902	798,903	1·60
1877.	174,675,835	41,440,526	133,235,309	32·78	8,683,795	6,797,227	717,684	1·67
1878.	174,957,269	34,595,199	140,362,070	34·07	7,126,761	7,048,884	605,774	1·71
1879.	179,483,871	36,493,684	142,990,187	34·17	2,628,117	7,194,734	592,500	1·72
1880.	194,634,441	42,182,852	152,451,589	35·83	9,461,402	7,773,869	834,793	1·83
1881.	199,861,537	44,465,757	155,395,780	35·93	2,944,191	7,594,145	751,513	1·76
1882.	205,365,252	51,703,601	153,661,651	35·12	—1,734,129	7,740,804	914,009	1·77
1883.	202,159,104	43,692,390	158,466,714	35·77	4,805,063	7,668,552	1,001,193	1·73
1884.	242,482,416	60,320,566	182,161,850	40·60	23,695,136	7,700,181	986,698	1·72
1885.	264,703,607	68,295,915	196,407,692	43·29	14,245,842	9,419,482	1,997,936	2·08
1886.	273,164,341	50,005,234	223,159,107	48·72	26,751,415[2]	10,137,009	2,299,079	2·21
1887.	273,187,626	45,872,851	227,314,775	49·14	4,155,668	9,682,929	990,887	2·09
1888.	284,513,842	49,982,484	234,531,358	50·13	7,216,583	9,823,313	932,025	2·10
1889.	287,722,063	50,192,021	237,530,042	50·23	2,998,684	10,148,932	1,305,392	2·15
1890.	286,112,295	48,579,083	237,533,212	49·70	3,170	9,656,841	1,082,271	2·02
1891.	289,899,230	52,090,199	237,809,031	49·21	275,819	9,584,137	1,077,228	1·98
1892.	295,333,274	54,201,840	241,131,434	49·38	3,322,403	9,763,978	1,086,420	2·00
1893.	300,054,525	58,373,485	241,681,040	49·01	549,606	9,806,888	1,150,167	1·99
1894.	308,348,023	62,164,994	246,183,029	49·44	4,501,989	10,212,596	1,217,809	2·05
1895.	318,048,755	64,973,828	253,074,927	50·35	6,891,898	10,466,294	1,336,047	2·08
1896.	325,717,537	67,220,104	258,497,433	50·95	5,422,506	10,502,430	1,370,001	2·07
1897.	332,530,131	70,991,535	261,538,596	51·06	3,041,163	10,645,663	1,443,004	2·08
1898.	338,375,984	74,419,585	263,956,399	51·01	2,417,803	10,516,758	1,513,455	2·03
1899.	345,160,903	78,887,456	266,273,447	50·86	2,317,048	10,855,112	1,590,448	2·07
1900.	346,206,980	80,713,173	265,493,807	50·08	—779,640	10,699,645	1,683,051	2·02
1901.	354,732,433	86,252,429	268,480,004	49·99	2,986,197	10,807,955	1,784,834	2·01
1902.	366,358,477	94,529,387	271,829,090	49·48	3,340,086	10,975,935	1,892,224	2·00
1903.	361,344,098	99,737,109	261,606,989	46·29	—10,222,101[3]	11,068,139	2,020,953	1·96
1904.	364,962,512	104,094,793	260,867,719	44·77	—739,270[4]	11,128,637	2,236,256	1·91
1905.	377,678,580	111,454,413	266,224,167	44·36	5,356,448	10,630,115	2,105,031	1·71
1906.	392,269,680	125,226,703	267,042,977	43·32	818,810	10,814,697	2,140,312	1·75
1907[6]	379,966,826	116,294,966	263,671,860	41·13	—3,371,117	6,712,771	1,235,746	1·05
1908.	408,207,158	130,246,298	277,960,860	41·96	14,289,000	10,973,597	1,925,569	1·66
1909.	478,535,427	154,605,148	323,930,279	47·64	45,969,419	11,604,584	2,256,643	1·71
1910.	470,663,046	134,394,500	336,268,546	48·12	12,338,267	13,098,161	2,807,465	1·87
1911.	474,941,487	134,899,435	340,042,052	47·18	3,773,506	12,535,851	1,668,773	1·74
1912.	508,338,592	168,419,131	339,919,461	46·00	—122,591	12,259,397	1,281,317	1·66
1913.	483,232,555	168,930,930	314,301,625	41·18	-25,617,836	12,605,882	1,430,511	1·71
1914.	544,391,369	208,394,519	335,996,850	42·64	21,695,225	12,893,505	1,964,541	1·87
1915.	700,473,814	251,097,731	449,376,083	56·31	113,379,233	15,736,743	2,980,247	1·97
1916.	936,987,802	321,831,631	615,156,171	76·88	165,780,088	21,421,585	3,358,210	2·68
1917.	1,382,003,268	502,816,970	879,186,298	99·08	264,030,127	35,802,567	3,094,012	4·44
1918.	1,863,335,899	671,451,836	1,191,884,063	146·28	312,697,765	47,845,585	4,466,724	5·87
1919.	2,676,635,725	1,102,104,692	1,574,531,033	189·45	382,646,970	77,431,432	7,421,002	9·32
1920.	3,041,529,587	792,660,963[5]	2,248,868,624	262·84	674,337,591	107,527,089	17,086,981	12·57
1921.	2,902,482,117	561,603,135[5]	2,340,878,984	266·37	92,010,360	139,551,520	24,815,246	15·88
1922.	2,902,347,137	480,211,335[5]	2,422,135,802	271·88	81,256,817	135,247,849	21,961,513	15·16
1923.	2,888,827,237	435,050,368[5]	2,453,776,869	272·31	31,641,067	137,892,735	16,465,303	15·30
1924.	2,819,610,470	401,827,195[5]	2,417,783,275	264·41	-35,993,594	136,237,872	11,916,479	14·90
1925.	2,818,066,523	400,628,837[5]	2,417,437,686	260·08	—345,589	134,789,604	11,332,328	14·50
1926.	2,768,779,184	379,048,085[5]	2,389,731,099	252·83	-27,706,587	130,691,493	8,535,086	13·83
1927.	2,726,298,717	378,464,347[5]	2,347,834,370	243·68	-41,896,729	129,675,367	8,559,401	13·46
1928.	2,677,137,243	380,287,010[5]	2,296,850,233	233·54	-50,984,137	128,902,945	10,937,822	13·11
1929.	2,647,033,973	421,529,268[5]	2,225,504,705	221·91	-71,345,528	124,989,950	12,227,562	12·46
1930.	2,544,586,411	366,822,452[5]	2,177,763,959	213·34	-47,740,746	121,566,213	13,518,205	11·91
1931.	2,610,265,698	348,653,762[5]	2,261,611,937	217·94	83,847,978	121,289,844	10,421,224	11·69
1932.	2,831,743,563	455,897,390[5]	2,375,846,172	226·14	114,234,236	121,151,106	9,330,125	11·53

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[1] The minus sign (—) denotes a decrease.

[2] This amount includes $10,199,520, for which land was taken from the Canadian Pacific Ry. Co.

[3] This amount includes $3,305,450, caused by the settlement of accounts with Ontario and Quebec.

[4] This amount takes into account $5,397,503, allowed to Ontario and Quebec under 47 Vict., c. 6.

[5] Active assets only. [6] Nine months. [7] The per capita figures are worked out on the basis of the estimates of population given on p. 145.

19.—Details of the Active Assets of the Public Debt of Canada, as at Mar. 31, 1921-32.

Item.	1921.	1922.	1923.	1924.
	$	$	$	$
Cash on hand and in banks	50,177,300	23,899,777	4,256,042	43,612,756
Specie reserve	83,959,873	85,710,325	130,150,335	103,427,038
Advances to banks, provinces, etc.	138,705,097	103,591,694	75,433,038	92,418,747
Advances to Imperial and Foreign Governments	187,408,305	162,766,689	106,540,470	40,071,243
Advances to Soldier Settlement Board	69,366,217	78,293,234	83,325,152	86,728,789
Miscellaneous current accounts	31,986,341	25,949,617	35,345,331	35,568,622
Totals	**561,603,133**	**480,211,336**	**435,050,368**	**401,827,195**

Item.	1925.	1926.	1927.	1928.
	$	$	$	$
Cash on hand and in banks	27,068,121	24,811,236	22,182,119	45,829,382
Specie reserve	123,976,668	99,093,810	100,935,933	95,352,703
Advances to banks, provinces, etc.	88,922,335	93,678,049	97,452,299	114,752,859
Advances to Imperial and Foreign Governments	36,633,691	36,495,929	35,985,138	31,249,720
Advances to Soldier Settlement Board	87,749,947	87,536,094	84,149,967	69,410,199
Miscellaneous current accounts	36,278,075	37,432,967	37,758,891	23,692,147
Totals	**400,628,837**	**379,048,085**	**378,464,347**	**380,287,010**

Item.	1929.	1930.	1931.	1932.
Cash on hand and in banks	82,410,885	27,991,597	44,599,432	57,352,841
Specie reserve	60,791,334	65,927,474	81,457,889	64,660,602
Advances to banks, provinces, etc.	166,080,660	140,578,126	111,454,050	173,183,733
Advances to Imperial and Foreign Governments	31,049,720	30,834,720	30,609,720	30,494,720
Advances to Soldier Settlement Board	58,175,573	57,036,174	48,150,885	47,804,080
Miscellaneous current accounts	23,021,087	44,454,361	32,381,786	82,401,415
Totals	**421,529,268**	**366,822,452**	**348,653,762**	**455,897,391**

20.—Details of the Gross Liabilities of Canada, as at Mar. 31, 1921-32.

Item.	1921.	1922.	1923.	1924.
	$	$	$	$
Funded debt[1] payable in—				
London	310,334,996	307,641,659	304,770,796	301,786,046
Canada	1,988,494,357	2,002,215,601	1,937,031,954	1,895,088,856
New York	135,874,000	110,934,000	210,933,000	210,932,000
Dominion notes	277,882,885	241,461,426	242,657,765	216,625,004
Savings banks	39,160,808	34,666,834	31,791,106	34,211,540
Temporary loans	90,835,000	144,535,000	95,432,000	91,520,000
Bank Note Circulation Redemption Fund	6,311,493	6,533,999	6,454,150	6,225,878
Trust funds	17,642,642	18,647,974	19,621,238	19,327,244
Province accounts	9,624,153	9,624,153	9,624,153	9,624,153
Insurance and Superannuation Funds—				
Government Annuities	4,366,993	4,946,896	5,892,605	7,151,398
Civil Service Superannuation and Retirement	8,767,793	10,074,917	12,033,053	13,994,246
Civil Service Insurance	1,125,400	1,442,329	1,816,073	2,251,592
Returned Soldiers' Insurance	87,979	384,982	969,710	2,061,174
Miscellaneous	11,973,618	9,237,367	9,799,634	8,811,339
Totals	**2,902,482,117**	**2,902,347,137**	**2,888,827,237**	**2,819,610,470**

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[1] In all cases, figures for funded debt less sinking funds are given.

20.—Details of the Gross Liabilities of Canada, as at Mar. 31, 1921-32—concluded.

Item.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$	$	$
Funded debt[1] payable in—								
London	274,447,490	270,962,177	267,649,036	264,230,350	260,768,038	257,185,700	253,512,033	249,677,848
Canada	1,895,112,087	1,920,128,841	1,941,852,161	1,870,049,325	1,823,839,934	1,804,977,029	1,800,264,602	2,012,210,212
New York	300,874,000	280,874,000	225,894,000	225,879,000	220,457,800	165,965,900	265,896,300	240,971,700
Dominion notes	206,712,088	182,583,404	172,167,639	188,631,490	204,501,217	174,326,618	141,066,257	157,388,180
Savings banks	33,611,133	32,830,544	31,922,043	31,103,776	28,375,770	26,086,036	24,750,227	23,919,677
Temporary loans	28,196,769	201,000	201,000	201,000	–	–	–	15,000,000
Bank Note Circulation Redemption Fund	6,338,346	5,894,254	5,849,030	5,929,219	6,098,583	6,363,362	6,788,162	6,811,793
Trust funds	19,307,853	18,665,350	18,460,169	19,755,617	20,337,483	20,976,277	20,329,745	18,752,801
Province accounts	9,623,817	9,623,817	9,623,816	9,623,817	9,623,817	9,623,817	9,623,817	9,623,817
Insurance and Superannuation Funds—								
Government Annuities	8,469,666	10,021,706	11,446,119	14,719,484	18,369,100	20,612,250	23,306,955	26,582,544
Civil Service Superannuation and Retirement	15,776,559	18,658,658	22,328,541	26,536,524	31,156,345	36,122,214	41,326,474	46,158,779
Civil Service Insurance	2,756,866	3,291,484	3,840,028	4,418,855	5,058,479	5,719,709	6,373,614	7,053,128
Returned Soldiers' Insurance	3,216,293	4,231,207	5,090,042	5,964,247	6,866,911	7,968,686	9,249,236	10,352,976
Miscellaneous	13,623,556	10,812,743	9,975,093	10,094,539	11,580,496	8,658,813	7,778,276	7,240,108
Totals	**2,818,066,523**	**2,768,779,185**	**2,726,298,717**	**2,677,137,243**	**2,647,033,973**	**2,544,586,411**	**2,610,265,698**	**2,831,743,563**

[1] In all cases, figures for funded debt less sinking funds are given.

21.—Funded Debt of the Dominion Payable in London, New York and Canada, as at Mar. 31, 1932.

NOTE.—Temporary loans (see Table **20**) are not now included in this table.

Description.	Amount.	Annual Interest Payable Thereon.	Date of Maturity.
	$	$	
PAYABLE IN LONDON.			
4 per cent loan of 1940-60	93,926,666	3,757,067	Oct. 1, 1960 (on or after Oct. 1, 1940, given 3 months' notice).
3½ " " of 1884	23,467,206	821,352	On giving 6 months' notice, or June 1, 1934.
3½ " " C.P. Ry. land grant	15,056,007	526,960	July 1, 1938.
3½ " " of 1930-50	137,058,841	4,797,059	July 1, 1950 (on or after July 1, 1930, on giving 6 months' notice).
3 " " of 1888	8,071,230	242,137	July 1, 1938.
3 " " of 1892	18,250,000	547,500	July 1, 1938.
3 " " of 1894	10,950,000	328,500	July 1, 1938.
2½ " " of 1897	4,888,186	122,205	Oct. 1, 1947.
Unpaid debentures	17,236	–	
Gross Totals	**311,685,372**	**11,142,780**	
Less sinking funds	62,007,524	–	
Net Totals	**249,677,848**	**11,142,780**	

21.—Funded Debt of the Dominion Payable in London, New York and Canada, as at Mar. 31, 1932—concluded.

NOTE—Temporary loans (see Table 20) are not now included in this table.

Description.	Amount.	Annual Interest Payable Thereon.	Date of Maturity.
PAYABLE IN NEW YORK.	$	$	
5 per cent bond loan, 1915-1935	874,000	43,700	Aug. 1, 1935.
5 " public service loan, 1916	1,000	–	Overdue.
5 " " "	85,000	–	Overdue.
5 " bond loan, 1922-1952	100,000,000	5,000,000	May 5, 1952. Subject to redemption May 1, 1942 or at 60 days' notice thereafter.
5½ " " 1919-1929	11,700	–	Overdue.
4½ " ten-year bonds	40,000,000	1,800,000	Feb. 1, 1936.
4 " bond loan, 1930-1960	100,000,000	4,000,000	Oct. 1, 1960, or 60 days' notice after Oct. 1, 1950.
Totals	**240,971,700**	**10,843,700**	
PAYABLE IN CANADA.	$	$	
Provincial notes, Nova Scotia	39,180	–	
Unpaid warrants, Prince Edward Island	550	–	
Compensation to seigneurs	12,140	728	
Compensation to townships	153	8	
Province of New Brunswick, 6 p.c. loan debentures	600	–	Overdue.
Province of Canada, 5 p.c. loan debentures	400	–	Overdue.
Dominion stock, issue A, 6 p.c.	4,000	240	Demand.
" B, 3½ p.c.	16,000	560	Demand.
" C, 3½ p.c.	48,667	1,703	Demand.
Debenture stock, 1919	2,000	–	Overdue.
" 5 p.c. (school lands)	33,293,471	1,664,674	July 1, 1934 or at 6 months' notice.
" 1921	200	–	Overdue.
War Savings Certificates	13,110	–	Overdue.
War Savings and Thrift Stamps	85,422	–	Overdue.
Dominion of Canada War Loan, 1915-25, 5 p.c.	12,800	–	Overdue.
" " 1917-37, 5 p.c.	90,166,900	4,508,345	Mar. 1, 1937.
Victory Loan, 1917, 5½ p.c., due 1922	69,200	–	Overdue.
" " due 1927	43,200	–	Overdue.
" " due 1937	236,299,800	12,996,489	Dec. 1, 1937.
Victory Loan, 1918, 5½ p.c., due 1923	76,200	–	Overdue.
" " due 1933	169,971,850	9,348,452	Nov. 1, 1933.
Victory Loan, 1919, 5½ p.c., due 1924	39,950	–	Overdue.
" " due 1934	226,138,350	12,437,609	Nov. 1, 1934, or at six months' notice.
Renewal Loan, 1922, 5½ p.c., due 1927	18,650	–	Overdue.
" " due 1932	34,449,950	1,894,747	Nov. 1, 1932.
Refunding Loan, 1923, 5 p.c., due 1928	12,800	–	Overdue.
" " due 1943	147,000,100	7,350,005	Oct. 15, 1943.
Refunding Loan, 1924, 4½ p.c., due 1944	50,000,000	2,250,000	Oct. 15, 1944.
Refunding Loan, 1925, 4½ p.c., due 1940	75,000,000	3,375,000	Sept. 1, 1940.
Refunding Loan, 1926, 4½ p.c., due 1946	45,000,000	2,025,000	Feb. 1, 1946.
Two Year Treasury Notes, 4 p.c., due 1932	40,000,000	1,600,000	Dec. 1, 1932.
National Service Loan, 1931, 5 p.c., due 1936	79,535,200	3,976,760	Nov. 15, 1936.
National Service Loan, 1931, 5 p.c., due 1941	141,663,000	7,083,150	Nov. 15, 1941.
Conversion Loan, 1931, 4½ p.c., due 1956	43,125,700	2,102,378	Nov. 1, 1956. Subject to redemption Nov. 1, 1946, or subsequently at 60 days' notice.
Conversion Loan, 1931, 4½ p.c., due 1957	37,523,200	2,063,776	Nov. 1, 1957. Bears 5½ p.c. to Nov. 1, 1932, subject to redemption Nov. 1, 1947, or at 60 days' notice thereafter.
Conversion Loan, 1931, 4½ p.c., due 1958	276,688,100	15,217,846	Nov. 1, 1958. Bears 5½ p.c. to Nov. 1, 1933, subject to redemption Nov. 1, 1948, or at 60 days' notice thereafter.
Conversion Loan, 1931, 4½ p.c., due 1959	285,772,300	15,717,477	Nov. 1, 1959. Bears 5½ p.c. to Nov. 1, 1934, subject to redemption Nov. 1, 1949, or at 60 days' notice thereafter.
Gross Totals	**2,012,599,507**	**105,614,947**	
Less sinking funds	389,295	–	
Net Totals	**2,012,210,212**	**105,614,947**	

The Interest-Bearing Debt of Canada.—The main burden imposed upon the Canadian people by their debt is the payment of the annual interest thereupon, and this burden is increased or decreased by changes in the rate of interest paid as well as by the paying off of old debt and the contracting of new debt.

Before the Great War, interest rates were comparatively moderate, but the unprecedented expenditure of the world's capital in that gigantic struggle led, in all the participating countries, to the raising of enormous loans at comparatively high rates of interest, which in many cases still have to be paid until refunding becomes possible under the terms of the contracts made between the nations and their creditors. Thus, in Canada, the average rate of interest paid upon all the direct interest-bearing obligations of the nation, which was only 3·368 p.c. at Mar. 31, 1913, rose to 5·164 p.c. at Mar. 31, 1922, and fell gradually to 4·923 p.c. at Mar. 31, 1932. The effect of the refundings of 1931 in reducing the general rate will not be fully felt until 1935. Details of the interest-bearing debt of Canada, and the interest charges thereon, as at March 31 of the years from 1913 to 1932, are given in Table **22.**

22.—The Interest-Bearing Debt, the Annual Interest Charge thereon and the Average Rate of Interest, as at Mar. 31, 1913-32.

Fiscal Yr.	Bonds, Debentures and Treasury Bills.	Annual Interest Charges on Bonds, Debentures and Treasury Bills.	Average Interest Rate on Bonds, Debentures and Treasury Bills.	Savings Bank Deposits, Trust and other Funds	Annual Interest on Savings Bank Deposits and other Funds.	Total Interest-bearing Debt.[1]	Annual Interest Charge.	Average Rate of Interest.
	$	$	p.c.	$	$	$	$	p.c.
1913.	260,869,037	8,973,746	3·439	91,735,123	2,904,287	352,604,160	11,878,033	3·368
1914.	311,833,272	11,162,047	3·579	93,031,928	2,957,544	404,865,200	14,119,591	3·487
1915.	358.659,932	13,075,447	3·645	91,910,510	2,935,881	450,570,442	16,011,328	3·554
1916.	508,000,366	20,499,696	4·035	92,240,955	2,960.002	600,241,321	23,459,698	3·908
1917.	893,208,877	39,098,579	4·376	96,885,192	3,114,315	990,094,069	42,212,894	4·263
1918.	1,472,098.608	71,121,368	4·831	95,796,899	3,096,532	1,567,895,507	74,217,900	4·733
1919.	2,035,218.097	102,218,489	5·022	100.636,102	3,441,803	2,135,854,199	105,660,292	4·947
1920.	2,596,816,821	134,559,302	5·181	107,038,317	4,275,480	2,703,855,138	138,834,782	5·134
1921.	2,520,997,021	130,416,007	5·173	107.345.348	4,429,302	2,628,342,369	134,845,309	5·130
1922.	2,564,587,671	133,482,113	5·204	105,379,439	4,399,661	2,669,967,110	137,881,774	5·164
1923.	2,547,105,821	131,476,511	5·161	106,763,391	4,531,156	2,653,869,212	136,007,667	5·125
1924.	2,504,033,820	128,571,337	5·134	110,113,766	4,626,715	2,614,147,586	133,198,052	5·092
1925.	2,503,763,169	125,928,071	5·029	113,943,282	4,758,780	2,617,706,451	130,686,851	4·992
1926.	2,484,410,336	125,108,738	5·035	119,205,393	4,977,889	2,603,615,729	130,086,627	4·996
1927.	2.439,340,736	123,399,911	5·058	126,310,527	5,274,429	2,565,651,263	128,674,340	5·015
1928.	2,377,581,086	119,479,400	5·025	136,485,482	5,721,330	2,514,066,568	125,200,730	4·980
1929.	2,325,413,986	116,843,934	5·024	145,780,369	6,156,036	2,471,194,355	122,999,970	4·977
1930.	2,250,837,286	112,942,215	5·017	154,997,435	6,572,018	2,405,834,721	119,514,233	4·967
1931.	2,320,832,286	115,491,955	4·976	163,994,443	6,969,151	2,484,826,729	122,461,106	4·928
1932.	2,579,238,724	128,188,969	4·970	136,356,977	5,522,579	2,715,595,701	133,711,548	4·923

[1] The total of interest-bearing debt, as here given, includes bonds purchased and held by the Treasury for sinking funds.

Guaranteed Debt of the Dominion.—Besides the direct debt of the Dominion, already dealt with, there are also large indirect obligations, arising mainly out of the taking over by the Dominion of the railway lines which now form the Canadian National Railways, and the subsequent extensions thereof. Together with these are other smaller indirect obligations, originating in the Government's guarantees of the bonds of the Canadian National Steamship services and of the bonds of its Harbour Commissions, issued in the main for harbour improvements. Statistics showing the growth of these indirect obligations in recent years are given in Table **23,** while Table **24** shows the obligations as they existed on Mar. 31, 1932.

23.—Guaranteed Securities of the Dominion Government (Amount Held by the Public), as at Mar. 31, 1923-32.

Fiscal Year.	Railways, Guaranteed as to Principal and Interest.	Railways, Guaranteed as to Interest only.	Canadian National Steamships.	Harbour Commissions	Total.
	$	$	$	$	$
1923	237,878,762	216,207,142	–	–	454,085,904
1924	309,628,762	216,207,142	–	–	525,835,904
1925	365,915,762	216,207,142	–	–	582,122,904
1926	364,415,762	216,207,142	–	–	580,622,904
1927	397,795,002	216,207,142	–	4,000,000	618,002,144
1928	440,224,186	216,207,142	828,789	9,467,165	666,727,282
1929	472,709,509	216,207,142	7,936,486	17,355,118	714,208,255
1930	590,091,292	216,207,142	9,400,000	21,335,118	837,033,552
1931	707,474,852	216,207,142	9,400,000	21,835,118	954,917,112
1932	753,080,146	216,207,142	9,400,000	21,835,118	1,000,522,406

24.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1932.

Security.	Amount of Guarantee Authorized.	Amount Outstanding and Held by the Public as at Mar. 31, 1932.	Where Payable.
	$	$	
Railway Securities Guaranteed as to Principal and Interest—			
1. Canadian Northern Ry. Co., 3 p.c. deb. stock, due 1953, £1,923,287	9,359,997	9,359,997	London.
2. Canadian Northern Ry. Co., 3½ p.c. deb. stock, due 1958, £1,622,586-19-9	7,896,590	7,896,563	London and Canada.
3. Canadian Northern Ontario Ry. Co., 3½ p.c. deb. stock, due 1961, £7,350,000	35,770,000	34,229,997	London and Canada.
4. Canadian Northern Alberta Ry. Co., 3½ p.c. deb. stock, due 1960, £647,260-5-6	3,150,000	3,149,998	London and Canada.
5. Grand Trunk Pacific Ry. Co., 3 p.c. bonds, due 1962, £14,000,000	68,040,000	34,992,000	London, New York and Canada.
6. Canadian Northern Alberta Ry. Co., 3½ p.c. deb. stock, due 1962, £733,561-12-10	3,570,000	–	London and Canada.
7. Canadian Northern Ry. Co., 4 p.c. deb. stock and bonds, due 1934	45,000,000	17,060,333	London, New York and Canada.
8. Grand Trunk Pacific Ry. Co., 4 p.c. bonds due 1962, £3,280,000	15,940,800	8,440,848	London, New York and Canada.
9. Canadian Northern Ry. Co., 7 p.c. bonds, due 1940	25,000,000	24,282,000	New York.
10. Grand Trunk Ry. Co., 7 p.c. bonds, due 1940	25,000,000	24,492,000	New York.
11. Canadian Northern Ry. Co., 6½ p.c. bonds, due 1946	25,000,000	24,499,000	New York.
12. Grand Trunk Ry. Co., 6 p.c. bonds, due 1936	25,000,000	24,475,000	New York.
13. Canadian National Ry. Co., 5 p.c. serial equipment bonds, 1923-38	22,500,000	9,750,000	Canada.
14. Canadian National Ry. Co., 5 p.c. bonds, due 1954	50,000,000	50,000,000	Canada.
15. Canadian National Ry. Co., 4½ p.c. bonds, due 1954	26,000,000	26,000,000	New York and Canada.
16. Canadian Northern Ry. Co., 4½ p.c. bonds, due 1935	17,000,000	17,000,000	New York and Canada.
17. Canadian National Ry. Co., 1927, 2 p.c. guar. deb. stock, £7,176,801	34,927,098	29,452,410	London and Canada.
18. Canadian National Ry. Co., 4½ p.c. gold bonds, due 1957	65,000,000	65,000,000	New York and Canada.
19. Canadian National Ry. Co., 4½ p.c. gold bonds, due 1968	35,000,000	35,000,000	London, New York and Canada.
20. Canadian National Ry. Co., 5 p.c. gold bonds, due July 1, 1969	60,000,000	60,000,000	London, New York and Canada.
21. Canadian National Ry. Co., 5 p.c. gold bonds, due Oct. 1, 1969	60,000,000	60,000,000	London, New York and Canada.

24.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1932—concluded.

Security.	Amount of Guarantee Authorized.	Amount Outstanding and Held by the Public as at Mar. 31, 1932.	Where Payable.
	$	$	
Railway Securities Guaranteed as to Principal and Interest—concluded.			
22. Canadian National Ry Co., 5 p.c. gold bonds, due 1970	18,000,000	18,000,000	London, New York and Canada.
23. Canadian National Ry. Co., 4¾ p.c. gold bonds, due 1955	50,000,000	50,000,000	London, New York and Canada.
24. Canadian National Ry. Co., 4½ p.c. gold bonds, due 1956	70,000,000	70,000,000	London, New York and Canada.
25. Canadian National Ry. Co., 4½ p.c. gold bonds, due 1951	50,000,000	50,000,000	New York.
Totals	847,154,485	753,080,146[1]	
Railway Securities Guaranteed as to Interest only—			
26. Grand Trunk Ry., Acquisition Guarantees—			
Grand Trunk 4 p.c. perp. guar. stock, £12,500,000	60,833,333	60,833,333	London and Canada.
Grand Trunk 5 p.c. perp. deb. stock, £4,270,375	20,782,492	20,782,492	London and Canada.
Great Western 5 p.c. perp. deb. stock, £2,723,080	13,252,323	13,252,323	London and Canada.
Grand Trunk 4 p.c. perp. deb. stock, £24,624,455	119,839,014	119,839,014	London and Canada.
Northern Ry. of Canada, 4 p.c. perp. deb. stock, £308,215	1,499,980	1,499,980	London and Canada.
Totals	216,207,142	216,207,142	
Other Securities Guaranteed as to Principal and Interest—			
27. Harbour Commissioners of Montreal, Montreal South Shore Bridge 5 p.c. bonds due 1969	19,500,000	19,000,000	London, New York and Canada.
28. Canadian National (West Indies) Steamships Ltd., 5 p.c. bonds, due 1955	10,000,000	9,400,000	London, New York and Canada.
29. Saint John Harbour Commission—			
(a) Bonded indebtedness of the city of Saint John, assumed by the Commission	1,467,165	1,467,165	$169,000 payable in London, balance in Canada.
(b) Debentures of the Commission issued to the city of Saint John, due 1952	667,953	667,953	Canada..
30. New Westminster Harbour Commissioners 4½ p.c. debentures due 1948	700,000	700,000	New York and Canada.
Totals	32,335,118	31,235,118	

[1] Railway securities guaranteed as to principal and interest to the value of $58,157,952 were held by the Minister of Finance as at Mar. 31, 1932, but these are not outstanding in the same sense as those in the hands of the public.

Section 2.—Provincial Public Finance.[1]

Provincial Governments in Canada are in the position, under Section 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury. Details of these payments are given for recent years in Tables **16** and **17** of this chapter. In addition, through their retention of ownership of their lands, minerals and other natural resources, the provinces which, by the voluntary action of their previously existing Governments entered Confederation, raise considerable revenues through land sales, sales of timber, mining royalties, leases of water powers, etc., while the Prairie Provinces formerly received from the Dominion special grants in lieu of land revenues. However, under legislation of 1930 whereby the Prairie Provinces were given control of their natural resources, all the provinces were placed on an equal footing in the administration of natural resources within their boundaries and as regards revenues accruing therefrom. Further, under Section 92 of the British North America Act, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province.

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[1] Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues detailed statements on Provincial Finance which may be obtained from the Dominion Statistician. For a list of these publications see Chapter XXIX.

While the *laisser faire* school of political thought was predominant throughout the country, provincial receipts and expenditures were generally very moderate, as may be seen, both for individual provinces and for the provinces collectively, from Tables **26** and **27**. From the commencement of the twentieth century, however, the Canadian public, more especially in Ontario and the West, began to demand increased services from their Governments, particularly in respect of education, sanitation, and public ownership and operation of public utilities. The performance of these functions necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed has been the taxation of corporations and estates, succession duties showing a considerably increased yield even within the comparatively short period of fifteen years from 1916 to 1931 covered by the statements compiled by the Finance Branch of the Bureau of Statistics.[1] The fact that provincial government is cheaper per head in the eastern provinces is evident from Table **27**, which gives the per capita ordinary revenue and expenditure for various fiscal years from 1881 to 1931. This, however, is not to be taken as evidence that the larger services rendered to the public in the provinces west of the Ottawa river, are not worth what is being paid for them.

For the half-century subsequent to Confederation, the provincial accounts, published by each Government according to its own system of accounting, were quite incomparable as among the provinces, a fact much regretted by students of provincial public finance. Upon the creation of the Dominion Bureau of Statistics in 1918, its Finance Branch undertook the work of placing the various provincial public accounts on a comparable basis, correlating, for example, the revenue derived from succession duties, taxation of corporations, sales of public lands, royalties on forest, mineral and fisheries products, as well as the expenditures on such services as agriculture, civil government, education and public works. As the result of the Bureau's exhaustive analysis of the provincial public accounts, a summary statement of the ordinary receipts and expenditures of the Provincial Governments appeared for the first time in the 1919 Year Book. The various items of receipts and expenditures were classified under appropriate headings and a uniform terminology was adopted. From these statements it is possible to ascertain the amounts received and expended in each year under the respective headings for each province, as well as for the provinces collectively. The figures for the years 1916 to 1920 will be found on pp. 680-685 of the 1921 Year Book, those for 1921 on pp. 786-791 of the 1922-23 Year Book and those for 1922 to 1926 on pp. 836-841 of the 1927-28 Year Book.

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[1] The succession duties collected by the provinces in 1931 amounted in the aggregate to $18,650,659, as compared with $1,020,972 as recently as 1904, or an increase of more than 18 fold in 27 years. The aggregate revenue raised by taxation of corporations, land, income and miscellaneous (exclusive of gasolene), increased from $7,217,548 in 1916 to $26,113,237 in 1931, an increase of 262 p.c. in 15 years.

The Bureau is at the present time engaged in making a more exhaustive analysis of the finances of the provinces, including extraordinary and capital as well as ordinary revenue and expenditure in the survey beginning with 1927.

Subsection 1.—Provincial Revenues and Expenditures.

Ordinary Revenues and Expenditures.—The total ordinary revenues of the nine provinces for their latest fiscal years for which final data are available ended 1931 were $179,143,480 as compared with $188,154,910 in 1930, $183,598,024 in 1929, $132,398,729 in 1925, $92,653,023 in 1920 and $50,015,795 in 1916. The total ordinary expenditures in 1931 were $190,754,202 as compared with $184,804,203 in 1930, $177,542,192 in 1929, $136,648,242 in 1925, $88,250,675 in 1920 and $53,826,219 in 1916. Thus the total ordinary revenues of the provinces show an increase of 258 p.c. in the short space of 15 years, while the total ordinary expenditures show an increase of 254 p.c. in the same period.

Considering individual provinces, the largest revenue for 1931 is that of Ontario, $54,390,092, Quebec being next with $41,630,620, and British Columbia third with $23,988,199. As regards total expenditures for the same year, that of Ontario was highest, $54,846,994, Quebec second with $40,854,245, and British Columbia third with $27,931,866. In 1931 British Columbia raised the largest revenue per head of population, *viz.*, $34.55, while Prince Edward Island had the lowest, $13.06. (For statistics of revenue and expenditure in 1930 and 1931, see Tables **24** and **25,** and for figures showing the absolute and per capita growth of ordinary revenue and expenditure see Tables **26** and **27.**)

The Growth of Provincial Taxation.—Whereas in earlier years the Dominion subsidies, together with the revenues arising out of the natural resources of the provinces and from fees for specific services rendered to the citizens, nearly sufficed to cover the whole expenses of government and rendered a resort to taxation for provincial purposes practically unnecessary in most of the provinces, the great increase in the functions of government since the commencement of the present century has put an end to this state of affairs. The aggregate amount of taxation for provincial purposes in the fiscal years prior to 1916 is unfortunately not available. Since that time provincial taxation has increased, according to the analyses made in the Dominion Bureau of Statistics, from $15,025,281 in 1916 to $92,550,438 in 1931, exclusive of liquor traffic profits, licences, etc., an increase of over six fold in 15 years.

The increase in the use of automobiles, both for commercial purposes and pleasure, is clearly demonstrated by the growing revenues from licences and permits issued by the Provincial Governments. In 1921 the total revenue of all provinces from automobile licensing amounted to $7,857,751. It increased to $9,290,900 in 1922; to $13,020,607 in 1925; to $15,822,339 in 1927; to $21,735,827 in 1929; decreasing to $20,321,307 in 1930 and to $19,952,575 in 1931.

The growth of revenue from the gasolene tax still further demonstrates the increasing use of motor vehicles. In 1923 Manitoba and Alberta were the only provinces showing a gasolene-tax revenue, the total being $280,404. In 1924 the five provinces of Prince Edward Island, Quebec, Manitoba, Alberta and British Columbia collected gasolene-tax revenue to the amount of $559,543, while in 1925 the same provinces with Ontario added, collected $3,521,388. In 1926 all provinces, except Saskatchewan, collected gasolene taxes which amounted to $6,104,716, in 1927 to $7,615,907 and in 1928 to $9,151,735; thereafter, gasolene taxes were collected in all provinces and amounted to $17,237,017 in 1929, $20,956,590 in 1930 and $23,859,067 in 1931.

The provincial revenues from the liquor traffic have increased considerably of late years. The adoption of government control of the sale of liquor in one province after another, until now it exists in all but Prince Edward Island, where prohibition is still in force, has resulted in trading profits, licensing revenues, and permit fees, all of which have swelled the provincial revenues. Prior to the adoption of government control such revenues were not available to the provinces. In 1925 the total revenue collected by all provinces from the liquor traffic was $8,964,824; in 1926 it was $11,609,392, increasing to $16,793,656 in 1927. In 1928, it amounted to $22,755,212, in 1929 to $27,599,687, in 1930 to $33,248,056 and in 1931 to $32,128,693. The method of control varies somewhat as among the provinces. In the majority of cases there are independent commissions or boards to administer the provincial Liquor Traffic Acts, but the accounting and trading profits are shown somewhat differently in the various provincial public accounts reports.[1]

Fiscal Years of the Provinces.—The fiscal years of the provinces end as follows: P.E.I., Dec. 31; N.S., Sept. 30; N.B., Oct. 31; Que., June 30; Ont., Oct. 31; Man. and Sask., April 30; Alta. and B.C., Mar. 31.

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[1] See the Bureau of Statistics' report "The Control and Sale of Liquor in Canada".

24.—Ordinary Revenues of the Provincial Governments for their respective fiscal years ended 1930 and 1931.

A.—PRINCIPAL ITEMS OF TAXATION.

Province and Year.		Taxation of Corporations, Land, etc.	Succession Duties.	Motor Vehicles.	Gasolene Tax.	Amusement and Race Track Meetings.
		$	$	$	$	$
Prince Edward Island	1930	248,201	25,946	145,996	141,059	7,684
	1931	232,524	11,640	136,075	151,128	8,167
Nova Scotia	1930	862,230	311,720	996,104	810,508	183,125
	1931	876,842	256,415	1,133,759	870,073	180,532
New Brunswick	1930	497,561	198,982	874,998	650,808	110,247
	1931	504,711	293,941	864,823	693,587	97,863
Quebec	1930	4,402,551	5,294,274	5,424,537	3,972,039	[1]
	1931	3,983,883	6,697,262	5,412,980	4,405,160	[1]
Ontario	1930	4,021,082	11,229,439	5,446,759	10,756,836	3,128,599
	1931	5,476,921	9,504,814	5,516,671	10,950,645	2,590,106
Manitoba	1930	2,606,009	1,033,564	1,152,451	763,834	436,933
	1931	2,098,351	452,023	1,121,049	1,184,753	352,879
Saskatchewan	1930	3,048,475	468,893	2,017,630	981,907	44,357
	1931	2,506,295	323,007	1,884,486	1,918,833	36,966
Alberta	1930	2,478,650	897,302	2,023,414	1,793,252	396,844
	1931	2,211,166	552,767	1,693,757	1,931,603	290,257
British Columbia	1930	8,388,258	836,637	2,239,418	1,086,347	463,679
	1931	8,222,544	558,790	2,188,975	1,753,285	418,130
Totals, All Provinces	**1930**	**26,553,017**	**20,296,757**	**20,321,307**	**20,956,590**	**4,771,468**[1]
	1931	**26,113,237**	**18,650,659**	**19,952,575**	**23,859,067**	**3,974,900**[1]

[1] Revenues from amusement taxes and race track meetings, collected by municipalities under Public Charities Fund, not separable: Provincial Government's share is treated as extraordinary revenue in Quebec and Ontario.

24.—Ordinary Revenues of Provincial Governments for their respective fiscal years ended 1930 and 1931—concluded.

B.—OTHER PRINCIPAL ORDINARY REVENUES.

Province and Year.	Subsidies and Allowances from Dominion Government.	Liquor Traffic Control.	Interest.	Legal Fees and Court Fines.	Public Utilities and Enterprises.	Forests, Timber and Woods.	Mines and Mining.	Total.
	$	$	$	$	$	$	$	$
P.E.I.......1930	497,182	–	–	24,241	–	–	–	1,148,749
1931	497,182	–	–	43,342	–	–	–	1,149,570
N.S........1930	1,669,958[1]	261,558	172,499	269,810	10,436[6]	26,379	672,057	7,682,066
1931	1,536,841[2]	774,358	214,463	251,920	10,724[6]	28,046	578,977	8,104,602
N.B........1930	1,266,766[3]	1,544,303[4]	9,794	90,795	–	805,221	28,924	6,583,726
1931	1,266,766[3]	1,220,065	14,474	96,874	–	400,523	26,859	5,980,914
Que........1930	2,315,756	10,410,573	1,298,060	1,696,130	1,206,878	4,367,660	734,703	43,585,142
1931	2,315,803	9,833,333[4]	1,550,530	482,434[7]	1,189,559	3,828,262	574,472	41,630,620
Ont........1930	2,716,360	8,465,000	1,464,125	1,703,321	1,138,532[8]	2,063,671	988,788	57,343,291
1931	2,716,453	10,875,000	124,711[5]	1,410,633	277,048[9]	2,779,534	766,227	54,390,092
Man........1930	1,823,893	1,511,928	1,305,940	534,707	980,730	–	–	13,922,135
1931	1,880,675	1,929,702	1,684,128	450,197	1,028,588	90,096	38,493	13,842,511
Sask.......1930	3,268,850	3,631,098	505,019	1,066,545	721,453	4,159	–	16,561,527
1931	3,134,986	1,417,353	309,236	889,315	870,839	138,379[10]	26,909	14,346,010
Alta........1930	2,367,388	2,586,435	700,379	1,044,856	5,839[11]	–	12,978	15,829,865[11]
1931	2,557,419	1,888,338	1,041,514	1,216,676	5,529[11]	121,639	383,240	15,710,962[11]
B.C........1930	738,817	4,837,161	396,867	896,773	311,329	3,311,248	941,861	25,498,409
1931	738,817	4,190,544	222,286	809,286	303,315	2,897,814	676,262	23,988,199
Totals, All 1930	**16,664,970**	**33,248,056**	**5,852,683**	**7,327,178**	**4,375,197[11]**	**10,578,338**	**3,379,311**	**188,154,910[11]**
Provinces 1931	**16,644,942**	**32,128,693**	**5,161,342**	**5,650,677**	**3,685,602[11]**	**10,284,293**	**3,071,439**	**179,143,480[11]**

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[1] Including $133,117 Department of National Defence Ottawa claim, subsidy previously withheld and special grant of $875,000. [2] Including special grant of $875,000. [3] Including $600,000 special grant. [4] A grant of $1,000,000 to Public Charities Fund was deducted. [5] No interest revenue was shown from Agricultural Development Board in 1931. [6] Beginning with 1930 the Nova Scotia Power Commission paid interest on its debt instead of reimbursing the Provincial Treasury. [7] Only net revenues and expenditures for law stamps and registry offices are shown for 1931. [8] Beginning with 1930 the Hydro-Electric Commission paid interest on its debt instead of reimbursing the Provincial Treasury. [9] Interest from Temiskaming and Northern Ontario Railway not shown. [10] Including fisheries. [11] In addition the earnings of Government Telephones in Alberta were $3,826,017 in 1930 and $3,600,556 in 1931.

25.—Ordinary Expenditures of Provincial Governments for their respective fiscal years ended 1930 and 1931.

Province and Year.	Legislation.	Civil Government.	Interest.	Sinking Funds.	Public Buildings, Roads and Works.	Education.	Agriculture.	Forests, Timber and Woods.
	$	$	$	$	$	$	$	$
P.E.I.......1930	26,661	43,830	148,138	[3]	320,719	324,180	24,564	–
1931	32,285	50,022	170,385	50,565	469,011	313,601	40,749	–
N.S........1930	144,742	262,485[1]	1,957,323[2]	–	2,348,241	1,088,036[5]	227,917[5]	197,793[6]
1931	102,050	268,481[1]	2,083,937[2]	–	2,131,479	1,158,350[5]	249,459[5]	189,715[6]
N. B.......1930	125,821	173,639[1]	2,048,664	566,953	1,951,319	773,806[5]	260,054[5]	275,774[5]
1931	106,657	173,407[1]	2,310,825	650,205	1,181,902	790,784[5]	265,833[5]	232,181[5]
Que........1930	803,107	1,992,404	3,303,972	1,078,293	14,601,211	4,693,628	2,096,884	1,725,248
1931	837,087	2,242,342	3,280,626	1,104,277	15,966,297	4,863,760	2,907,476	2,036,127
Ont 1930	1,061,471	3,422,905	11,782,734[7]	60,285	8,124,358	13,211,183	1,421,288	2,024,991
1931	513,839	3,563,891	11,153,338[7]	28,175	6,426,785	13,323,985	1,474,837	1,748,957
Man........1930	211,355	753,097	4,299,599	203,811	1,752,067	2,290,970	160,339	–
1931	222,616	861,688	4,442,508	228,276	1,944,818	2,350,387	144,338	125,175
Sask.......1930	496,835	1,124,037	2,722,623	28,151	2,832,450	3,901,258	473,056	–
1931	350,349	1,327,256	3,202,882	28,151	2,434,644	4,226,833	381,862	27,923
Alberta....1930	229,005	1,074,422	4,390,722	525,943	1,943,314	2,713,065	512,426	–
1931	407,430	1,232,896	5,039,366	695,554	2,389,850	3,141,800	538,631	25,370
B. C.......1930	255,143	2,322,661	4,532,530	1,743,541[4]	3,691,045	4,249,418	350,400	490,246
1931	262,728	2,408,691	5,064,499	1,939,928[4]	3,762,917	4,318,113	357,492	1,170,740
Totals, All 1930	**3,354,140**	**11,169,486[1]**	**35,186,305[7]**	**4,206,977**	**37,561,724**	**33,245,544**	**5,526,928**	**4,714,052**
Provinces 1931	**2,835,041**	**12,128,674[1]**	**36,748,366[7]**	**4,725,131**	**36,707,703**	**34,487,613**	**6,360,677**	**5,556,188**

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[1] Civil Government of certain departments is not separable. [2] The Nova Scotia Power Commission paid $603,163 interest on funded debt in 1930 and $649,179 in 1931. [3] There was $48,266 extraordinary sinking fund expenditures in 1930. [4] Taken from "Capital Account (Expenditure out of Income)". [5] Including Civil Government. [6] Including lands, game and fish. [7] In addition the Hydro-Electric Power and other Commissions in Ontario paid interest charges on their debt, which together with interest received on bond items amounted to $8,985,784 in 1930 and $11,644,748 in 1931.

25.—Ordinary Expenditures of Provincial Governments for their respective fiscal years ended 1930 and 1931—concluded.

Province and Year.	Legal Administration.	Mothers' Allowances.	Old Age Pensions.	Colonization.	Health and Sanitation.	Hospitals.	Charities.	Correctional Institutions.	Total.
	$	$	$	$	$	$	$	$	$
P.E.I....1930	48,295	-	-	-	4,791	131,479	10,990	-	1,133,366
1931	84,574[1]	-	-	-	24,675	130,801	17,612	-	1,453,191
N. S.....1930	102,743	-	-	25,159	46,731	908,229	96,475[5]	24,344	7,900,987
1931	43,072	333,471	-	19,892	63,395	908,042	124,554[5]	22,643	8,194,592
N.B.....1930	296,733	-	-	16,111	115,901	393,795	4,379	30,288	7,218,856
1931	278,711	-	-	11,731	135,557	385,040	5,463	27,197	6,761.420
Que......1930	3,197,711	-	-	531,844	482,322	1,685,965	27,290[6]	497,825	39,374,910
1931	2,389.540	-	-	538,886	662,450	1,015,352[3]	41,999[6]	302,009[3]	40,854,245
Ont.... .1930	2,308,704	1,368,818	2,120,638	213,255	1,051,852	4,981,187	445,496	1,366,878	57,989,353
1931	2,514,627	1,479,175	2,248,979	135,393[4]	1,087,573	4,336,337[3]	482,733	922,860[3]	54,846,994
Man.....1930	840,560	512,258	610,489	-	158,146	1,125,941	364,670	84,852	13,637,397
1931	896,767	490,605	708,780	-	183,753	1,121,229	368,138	61,137	14,491,672
Sask.. .1930	1,468,124	499,275	532,559	4,282	245,987	1,524,612	187,495	45.883	17,079,469
1931	1,485,628	524,970	901,289	11,144[4]	249,213	1,545,471	205,945	48,215	18,202,677
Alta... 1930	1,071,115	397,155	306,768	20,066	150,517	1,250,830	187,334	117,208	15 402,885[7]
1931	1,163,144	466,536	714,892	22,440	164,785	1,292,531	191,605	125,279	18,017,544[7]
B. C.. .1930	1,373,283	777,916	473,528	12,524	76,736	2,037,588	291,260	115,645	25,066,980
1931	1,372,894	835,106	562,354	26,468	83,336	2,047,683	305,355	105,926	27,931,866
Totals, All Provinces 1930	**10,707.268**	**3,555,422**	**4,043,982**	**823,241**	**2,332,983**	**14,039,626**	**1,615,389**	**2,282,923**	**184,804,203**[7,8]
1931	**10,228.957**	**4,129,863**	**5,136,294**	**765,954**	**2,654,737**	**12,782,486**	**1,743.404**	**1,615,266**	**190,754,202**[7,8]

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[1] Including provincial police $34,518. [2] Only net revenues and expenditures for law stamps and registry offices are shown for 1931. [3] Net expenditure only, revenue having been deducted. [4] Including harvest labour. [5] Including Civil Government. [6] Quebec's charitable expenditure is, for the most part, treated as extraordinary. This is not included in the ordinary income account of the province. [7] In addition, the expenditures of Government Telephones in Alberta were $3,670,827 in 1930 and $3,744,726 in 1931. [8] See footnotes to other bold face totals when using these figures.

26.—Statement Showing the Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916 to 1931.

NOTE.—For provincial ordinary receipts and expenditures in all other provincial fiscal years since Confederation, see 1932 Year Book, pp. 734-736.

Fiscal Year.	P.E.I.		N.S.		N.B.		Quebec.	
	Receipts.	Expenditure.[1]	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	$	$	$	$	$	$	$	$
1871..............	385,014	406,236	525,824	600,344	451,076	438,407	1,632,032	1,575,545
1881..............	275,380	261,276	476,445	494,582	607,445	598,844	3,191,779	3,566,612
1891..............	274,047	304,486	661,541	692,538	612,762	680,813	3,457,144	4,095,520
1901..............	309,445	315,326	1,090,230	1,088,927	1,031,267	910,346	4,563,432	4,516,554
1911..............	374.798	398,490	1,625,653	1,790,778	1,347,077	1,403,547	7,032,745	6,424,900
1916..............	508,455	453,151	2,165,338	2,152,773	1,580,419	1,568,340	9,647,984	9,436,687
1917..............	496.053	487,113	2,118,620	2,344,009	1,572,814	2,166,904	10,441,114	9,907,672
1918..............	514,475	484,416	2,332,634	2,573,797	2.357,909	2,399,062	13,806,392	11,671,830
1919..............	501,915	655,409	3,280.313	3,280.282	2,182,420	2,595,937	12,666,352	12,371,131
1920..............	740,973	660.774	3.801,016	3,916,848	3,100,892	2,969,323	14,472,651	13,520,740
1921..............	769,719	694,042	4,586,840	4,678,146	2,892,905	3,432,512	15,914,521	14,624,088
1922..............	748,888	687,241	4,791,208	4,791,998	3,226,727	2,985,877	21,609,396	16,575,977
1923..............	554,303	790,046	5,317,335	5,229,178	3,479,733	3,648,273	21,634,642	19,930,276
1924..............	738,431	715,882	5,461,383	5,579,525	3,725,286	3,835,522	23,170,733	21,567,293
1925..............	740,076	745,338	4,467,484	5,969,544	3,556,330	4,112,569	25,021,329	23,629,390
1926..............	832,551	756,114	5,744,575	6,327,043	4,206,853	4,078,775	27,206,335	26,401,480
1927..............	836,748	870,427	6,517,073	6,566,143	5,096,446	4,636,157	30,924,997	29,078,703
1928..............	1,034,782	913,548	6,933,630	7,543,078	5,290,098	5,393,784	34,807,783	32,821,226
1929..............	1,083,571	1,033,315	7,390,410	7,288,486	5,991,375	6,521,575	39,976,283	35,964,487
1930..............	1,148,749	1,133,366	7.682,066	7,900,987	6,583,726	7,218,856	43,585,142	39,374,910
1931..............	1,149,570	1,453,191	8,104,602	8,194,592	5,980,914	6,761,420	41,630,620	40,854,245

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[1] Includes expenditure on capital account, except for 1901.

26.—Statement Showing the Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916 to 1931.—continued.

NOTE.—For provincial ordinary receipts and expenditures in all other provincial fiscal years since Confederation, see 1932 Year Book, pp. 734-736.

Fiscal Year.	Ontario.		Manitoba.		Saskatchewan.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	$	$	$	$	$	$
1871	2,333,180	1,816,784	–	–	–	–
1881	2,788,747	2,592,800	121,867	226,808	–	–
1891	4,138,589	4,158,460	590,484	664,432	–	–
1901	4,466,044	4,038,834	1,008,653	988,251	–	–
1911	9,370,834	9,916,934	4,454,190	4,002,826	2,699,603	2,575,145
1916	13,841,339	12,706,333	5,897,807	6,147,780	4,801,064	5,258,756
1917	18,269,597	16,518,223	6,292,986	6,860,355	5,631,910	5,553,965
1918	19,270,122	17,460,404	6,723,013	7,307,727	7,797,153	6,828,596
1919	20,692,166[1]	21,464,575	8,613,364	8,497,942	8,333,759	8,125,203
1920	25,981,517[1]	25,880,843	9,870,710	10,602,955	9,903,885	8,707,833
1921	30,411,396[1]	28,579,688	9,358,956	10,063,139	11,789,920	12,151,665
1922	39,725,370[1]	37,458,395[2]	7,940,457	8,381,667	11,801,894	13,322,120
1923	34,818,729[1]	49,305,439	10,078,730	10,616,567	12,576,763	12,886,544
1924	41,721,961[1]	48,866,569	10,926,634	10,455,187	12,520,411	12,449,150
1925	48,013,852[1]	51,462,178	7,866,519[3]	6,824,155[3]	12,378,755	12,498,933
1926	52,039,855[1]	51,251,781	10,582,537	10,431,652	13,317,398	13,212,483
1927	56,306,225	55,763,689	11,592,758	10,446,285	13,050,217	12,962,217
1928	58,426,983	58,198,746	10,962,317	11,103,109	13,564,893	13,449,632
1929	64,549,718	61,906,824	12,150,490	12,344,493	16,096,666	15,971,231
1930	57,343,291	57,989,353	13,922,135	13,637,397	16,561,527[4]	17,079,469[4]
1931	54,390,092	54,846,994	13,842,511	14,491,673	14,346,010	18,202,677

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[1] Includes capital revenue for lands which cannot be separated. [2] Includes capital expenditure which cannot be separated. [3] For eight months. [4] Certain minor items, amounting to about $600,000, shown in previous years as ordinary receipts and expenditures have been transferred to the extraordinary classification in the 1930 provincial accounts report.

26.—Statement Showing the Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916 to 1931—concluded.

Fiscal Year.	Alberta.		British Columbia.		Totals for all Provinces.[3]	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	$	$	$	$	$	$
1871	–	–	191,820[4]	97,692[4]	5,518,946[3]	4,935,008[3]
1881	–	–	397,035	378,779	7,858,698[3]	8,119,701[3]
1891	–	–	959,248	1,032,104	10,693,815[3]	11,628,353[3]
1901	–	–	1,605,920	2,287,821	14,074,991[3]	14,146,059[3]
1911	3,309,156[1]	3,437,088	10,492,892	8,194,803	40,706,948[3]	38,144,511[3]
1916	5,281,695	6,018,894	6,291,694	10,083,505	50,015,795[3]	53,826,219[3]
1917	6,260,106	6,752,504	6,906,784	9,531,740	57,989,984[3]	60,122,485[3]
1918	7,660,762	8,303,808	8,882,845	9,023,269	69,345,305[3]	66,052,909[3]
1919	9,642,739	9,525,749	10,931,279	9,887,745	76,844,307[3]	76,403,973[3]
1920	10,919,776	10,423,356	13,861,603	11,568,003	92,653,023[3]	88,250,675[3]
1921	11,086,937	13,109,304	15,219,264	15,236,931	102,030,458[3]	102,569,515[3]
1922	9,324,890	11,235,192	16,987,869	17,436,487	116,156,699[3]	112,874,954[3]
1923	10,419,146	10,990,830	18,758,864	19,273,942[2]	117,738,244[3]	132,671,095[3]
1924	10,506,627	11,174,690	19,124,580	20,515,367[2]	127,896,047[3]	135,159,185[3]
1925	11,531,026	11,249,323	18,823,358	20,156,702[2]	132,398,729[3]	136,648,242[3]
1926	11,912,128	11,894,328	20,608,672	19,829,522[2]	146,450,904[3]	144,183,178[3]
1927	12,263,401	12,479,381	20,257,916	19,408,881[2]	156,845,780[3]	152,211,883[3]
1928	16,149,896[5]	15,870,133[5]	20,939,123	20,215,655[2]	168,109,505[3]	165,538,910[3]
1929	15,265,084	13,686,261	21,094,427	22,825,520[2]	183,598,024[3]	177,542,192[3]
1930	15,829,865	15,402,885	25,498,409	25,066,980[2]	188,154,910[3]	184,804,203[3]
1931	15,710,962	18,017,544	23,988,199	27,931,866[2]	179,143,480[3]	190,754,202[3]

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[1] Includes small sums of capital revenue and expenditure which cannot be separated. [2] Includes sinking funds taken from capital expenditure (expenditure out of income). [3] See footnotes to figures for individual provinces when using these figures. [4] Six months. [5] Fifteen months ended Mar. 31 ,1928.

27.—Ordinary Receipts and Expenditures of Provincial Governments per head of Population for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916 to 1931.

NOTE.—As this table is based upon Table 26, those using it should refer to that table for totals and for explanatory notes. Per capita figures are calculated on the basis of the population figures given on p. 145.

(A) ORDINARY RECEIPTS.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Average for All Provinces.
	$	$	$	$	$	$	$	$	$	$
1871	4·10	1·36	1·58	1·37	1·44	–	–	–	5·31	1·50
1881	2·53	1·10	1·90	2·35	1·45	1·97	–	–	8·10	1·82
1891	2·51	1·49	1·91	2·32	1·96	3·86	–	–	9·79	2·21
1901	3·00	2·37	3·12	2·77	2·05	3·96	–	–	8·97	2·62
1911	3·99	3·30	3·83	3·51	3·71	9·66	5·49	8·85	26·70	5·65
1916	5·53	4·29	4·29	4·48	5·10	10·65	7·41	10·65	13·80	6·25
1917	5·51	4·21	4·27	4·81	6·71	11·28	8·51	12·32	14·88	7·19
1918	5·78	4·65	6·39	6·30	7·02	11·90	11·50	14·67	18·74	8·51
1919	5·64	6·47	5·85	5·67	7·42	14·93	11·91	17·82	22·40	9·25
1920	8·33	7·37	8·14	6·30	9·07	16·62	13·59	19·33	27·34	10·83
1921	8·65	8·75	7·46	6·74	10·37	15·34	15·57	18·85	28·99	11·61
1922	8·41	9·18	8·29	9·00	13·33	12·89	15·35	15·75	31·40	13·02
1923	6·37	10·27	8·95	8·84	11·56	16·28	16·17	17·57	33·80	13·07
1924	8·59	10·58	9·53	9·29	13·64	17·48	15·83	17·60	33·49	13·99
1925	8·61	8·67	9·05	9·82	15·43	12·45	15·36	19·15	32·01	14·25
1926	9·57	11·15	10·62	10·45	16·45	16·56	16·22	19·59	34·01	15·50
1927	9·62	12·65	12·81	11·64	17·49	17·81	15·52	19·37	32·52	16·28
1928	11·76	13·46	13·19	12·82	17·82	16·51	15·74	24·54	32·67	17·09
1929	12·31	14·35	14·83	14·42	19·36	17·95	18·23	22·32	32·01	18·31
1930	13·05	14·95	16·22	14·43	16·94	20·21	18·34	22·36	37·72	18·43
1931	13·06	15·80	14·66	14·48	15·85	19·77	15·56	21·46	34·56	17·27

(B) ORDINARY EXPENDITURES.

1871	4·32	1·55	1·53	1·32	1·12	–	–	–	2·69	1·34
1881	2·40	1·12	1·87	4·47	1·35	3·66	–	–	7·71	1·89
1891	2·79	1·54	2·12	2·75	1·97	4·34	–	–	10·53	2·41
1901	3·06	2·37	2·75	2·74	1·85	3·88	–	–	12·78	2·63
1911	4·24	3·64	3·99	3·20	3·92	8·68	5·23	9·19	20·85	5·29
1916	4·93	4·26	4·26	4·38	4·68	11·10	8·12	12·13	22·11	6·73
1917	5·41	4·66	5·89	4·57	6·06	12·29	8·39	13·29	20·54	7·46
1918	5·44	5·13	6·50	5·33	6·36	12·93	10·07	15·91	19·04	8·11
1919	7·36	6·47	6·96	5·54	7·70	14·73	11·61	17·61	20·26	9·19
1920	7·42	7·59	7·79	5·88	9·04	17·85	11·94	18·45	22·82	10·31
1921	7·80	8·93	8·85	6·19	9·74	16·50	16·05	22·29	29·02	11·67
1922	7·72	9·18	7·68	6·88	12·57	13·61	17·32	18·98	32·23	12·66
1923	9·08	10·09	9·38	8·15	16·36	17·15	16·56	18·53	34·73	14·72
1924	8·32	10·81	9·81	8·64	15·97	16·73	15·74	18·72	35·93	14·78
1925	8·67	11·59	10·46	9·27	16·54	10·80	15·51	18·69	34·29	14·70
1926	8·69	12·29	10·30	10·14	16·20	16·32	16·09	19·56	32·72	15·26
1927	10·00	12·75	11·65	10·94	17·32	16·05	15·41	19·71	31·15	15·80
1928	10·72	14·65	13·45	12·09	17·75	16·72	15·60	24·12	31·54	16·83
1929	11·74	14·15	16·14	13·00	18·57	18·23	18·09	20·01	34·64	17·70
1930	12·88	15·37	17·78	13·94	17·13	19·79	18·91	21·75	37·08	18·10
1931	16·51	15·97	16·57	14·22	15·98	20·70	19·74	24·61	40·25	18·38

Subsection 2.—Provincial Debts and Assets.

Total Liabilities of the Provinces.—The total direct liabilities of the provinces in 1931 amounted to $1,276,629,288, showing a steady and rapid increase since 1896, when they were but $51,315,130. In addition to the direct liabilities, there are also certain indirect liabilities which amounted in 1931 to $210,668,231, so that the total liabilities of the provinces reached $1,487,297,519 in that year. Figures are given by provinces for the fiscal years 1896, 1911 and 1916-32 in Table **28.**

Bonded Indebtedness of the Provinces.—Of the total liabilities of the provinces the major part is represented by bonded debt owing to the public in Canada and abroad. The total bonded debt amounted to $1,148,451,597 in 1932. In addition to this bonded debt there were treasury bills outstanding on provincial accounts amounting to $103,707,602 for 1931. Figures of bonded debt for this and previous years to 1916 are given in Table **29.** The rapid rise in the bonded debt of the provinces in the period under review is accounted for largely by the development of public ownership of utilities (such as the "Hydro" in Ontario), the extension of the highways and good roads systems in all provinces (highway debentures outstanding in 1931 accounting for almost $375,000,000 of the provincial debt), the cultural training advances and requirements for the promotion of industrial activities and public and social welfare. These demanded heavy expenditures which could not easily be met out of current revenue, and the borrowings, while increasing the public debt, are in the main considered justifiable, as the public utilities are meeting from their revenues the interest on indebtedness incurred in their construction, and the provincial assets generally are sound enough to take care of capital investment for other services which are necessary to develop the country.

Interest Payments of the Provinces.—The interest payments of the Provincial Governments have naturally increased in proportion to their growing indebtedness described above. In 1916, the first year for which aggregate figures are available on a comparable basis, the total interest payments of the provinces were $7,817,844, in 1921 they had risen to $19,818,266, in 1926 they were $37,366,925, in 1929 $41,207,090, but in 1931 they were reduced to $36,748,366 exclusive of interest paid by the N.S. Power Commission and the Ontario Hydro-Electric Power and other Commissions. The 1931 interest payments of the Provincial Governments were as follows: P.E.I., $170,385; N.S. $2,083,937;[1] N.B., $2,310,825; Que., $3,280,626; Ont., $11,153,338;[2] Man., $4,442,508; Sask., $3,202,882; Alta., $5,039,366; B.C., $5,064,499.

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[1] The Nova Scotia Power Commission paid $649,179 interest on funded debt.

[2] In addition the Hydro-Electric Power and other Commissions paid interest charges on their debt which, together with interest received on bond issues, amounted to $11,644,748.

28.—Direct Liabilities of the Provincial Governments, by Provinces, for their respective fiscal years, 1896, 1911, 1916-32.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
1896	392,037	3,430,913	2,962,892	32,207,058	33,644
1911	995,683	10,693,690	6,869,104	28,170,982	24,765,923
1916	1,141,901	13,497,394	9,268,231	41,090,736	58,873,101
1917	1,154,344	13,910,236	19,132,607	42,259,090	61,795,108
1918	1,233,544	14,527,799	20,481,800	42,891,544	75,645,917
1919	1,465,967	15,342,056	23,966,816	43,965,512	97,572,781
1920	1,462,714	17,811,331	26,670,764	48,756,764	128,191,754
1921	1,515,184	22,502,836	30,134,573	58,336,436	204,959,690
1922	1,679,687	25,321,558	31,929,157	62,115,061	240,923,995
1923	2,077,046	29,121,152	34,794,329	69,661,633	303,391,292
1924	2,274,409	32,925,041	36,963,264	92,822,593	348,722,948
1925	2,490,200	39,860,448	41,193,074	98,856,760	345,207,247
1926	2,518,944	42,517,714	43,260,146	102,333,651	366,629,582
1927	2,725,260	45,926,428	46,754,509	100,316,582	371,422,300
1928	2,964,186	49,683,851	54,144,053	100,761,321	396,364,569
1929	3,132,234	55,277,896	53,063,658	101,144,764	429,289,134
1930	3,398,047	62,311,047	62,534,333	97,856,855	476,178,249
1931	3,875,593	66,314,896	67,942,954	113,006,985	524,347,168
1932[5]	4,246,981	64,161,747	59,901,754	108,188,709	577,705,000

Fiscal Year.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	$	$	$	$	$
1896	5,818,818[1]	[2]	[2]	6,469,768	51,315,130
1911	45,820,300[1]	[3]	9,293,533	12,053,227	138,662,442
1916	33,086,689	25,180,080	29,011,903	29,011,991	240,162,026
1917	35,653,270	26,797,807	31,382,873	32,903,017	264,988,354
1918	39,530,479	29,645,837	33,094,583	32,922,713	289,974,216
1919	46,610,583	32,413,340	35,674,160	37,460,872	334,472,087
1920	60,565,734	38,016,003	44,587,763	43,693,365	409,756,192
1921	73,054,507	45,928,262	68,438,866	60,600,198	565,470,552
1922	78,900,821	51,448,807	76,377,599	71,707,420	640,404,105
1923	82,199,499	55,158,455	84,010,266	79,266,936	739,680,608
1924	84,999,739	57,309,575	90,901,271	85,094,660	832,013,500
1925	84,219,977	58,118,615	95,670,360	91,640,679	857,257,360
1926	85,523,127	58,316,504	103,007,997	89,392,147	893,499,812
1927	88,003,110	58,028,682	110,342,869[4]	91,687,100	915,206,840
1928	91,995,078	59,292,654	110,342,869	97,590,159	963,138,740
1929	98,705,271	66,729,579	115,548,417	111,180,311	1,034,071,264
1930	105,940,743	81,178,245	127,465,842	124,090,335	1,140,953,696
1931	112,214,653	102,575,953	142,248,524	144,102,562	1,276,629,288
1932[5]	124,558,810	134,068,943	149,601,000	140,949,520	1,363,382,464

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[1] Including indirect liabilities. [2] Province not organized. [3] Not available. [4] Liabilities as at Mar. 31, 1928. No balance sheet was shown in the interim report for the year ended Dec. 31, 1927. [5] Subject to revision.

29.—Bonded Debt (Exclusive of Treasury Bills) of Provincial Governments, by Provinces, fiscal years 1916 to 1932.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
1916	733,000	13,443,087	9,100,647	38,346,128	52,411,401
1917	733,000	13,362,707	15,809,856	39,462,996	55,301,501
1918	733,000	14,490,813	17,163,089	39,827,770	66,526,501
1919	733,000	14,614,893	18,585,760	39,706,614	81,026,501
1920	733,000	17,202,647	20,683,236	40,708,114	109,186,900
1921	858,000	20,678,267	23,573,432	51,652,113	184,693,420
1922	1,033,000	24,608,347	26,628,432	55,604,926	222,361,338
1923	1,183,000	27,134,507	28,583,932	60,605,226	255,587,757
1924	1,683,000	31,458,640	30,737,909	75,605,226	292,845,257
1925	1,833,000	36,000,928	32,345,909	81,944,926	277,045,257
1926	1,873,000	35,986,324	35,325,909	78,004,926	280,559,094
1927	1,933,000	40,708,457	36,554,409	79,212,226	293,365,994
1928	2,185,000	34,824,713	37,845,303	80,731,877	322,365,844
1929	2,109,000	46,395,847	34,780,603	80,334,792	350,563,844
1930	2,329,000	55,483,480	41,211,696	76,735,292	398,821,344
1931	2,104,000	60,325,613	45,858,996	84,235,292	455,375,344
1932[2]	3,504,000	61,740,747	58,739,662	91,987,692	499,986,000

Fiscal Year.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	$	$	$	$	$
1916	30,396,274	24,292,044	29,000,200	21,153,146	218,875,927
1917	31,196,870	25,439,187	30,595,200	23,153,146	235,054,463
1918	33,890,870	28,019,387	31,500,200	23,071,936	255,223,566
1919	36,897,870	29,963,410	34,635,200	27,571,936	283,735,184
1920	49,700,870	35,237,170	41,989,900	34,071,936	349,513,773
1921	61,929,870	41,785,436	59,010,257	46,511,436	490,692,231
1922	66,331,121	49,685,476	67,373,279	61,851,436	575,477,355
1923	67,914,095	52,807,876	78,522,279	65,851,436	638,190,108
1924	69,637,095	52,492,956	78,594,760	68,851,436	701,906,279
1925	66,658,595	50,493,376	81,459,407	76,443,736	704,225,134
1926	64,433,595	54,114,176[1]	86,894,666	71,485,736	708,677,426
1927	67,293,828	56,944,576	90,890,458	75,485,736	742,388,684
1928	69,822,828	58,309,256	90,899,816	72,275,736	769,260,373
1929	71,465,161	58,275,776	96,532,443	77,482,736	817,940,202
1930	76,641,161	73,667,316	106,888,380	87,365,236	919,142,905
1931	81,381,906	85,141,205	106,866,573	95,358,236	1,016,647,165
1932[2]	89,630,906	101,831,236	128,970,593	112,060,761	1,148,451,597

[1] Liabilities statement is for April 30; this amount includes $500,000 due May 1. [2] Subject to revision.

Assets of the Provincial Governments.—The liabilities of the Provincial Governments are to a considerable extent offset by corresponding assets, some of which are earning assets as in the case of the Nova Scotia Power Commission, the Ontario Hydro-Electric Power Commission and the Temiskaming and Northern Ontario Railway and the telephone systems of the Prairie Provinces. Further, a total of something like $375,000,000 has been invested by the various Provincial Governments in highway systems, and while these systems cannot be considered as realizable assets, the interest charge on them may be considered as being met out of the large revenues derived from the gasolene tax and other taxation on motor vehicles. Back of all this is the value of the natural resources which, although not realizable in times like the present, may through their development assist in wiping off the obligations which mature in the years to come. A summary of provincial assets is presented in Table **30**.

30.—Assets of the Provincial Governments at the close of

Note.—Subject to revision. The items are stated

No.	Item.	Prince Edward Island. 1932.	Nova Scotia. 1931.	New Brunswick. 1932.
		$	$	$
1	Accounts receivable and inventories	–	2,568,645	1,730,450
2	Arrears of taxes	–	–	–
3	Cash, balances or in banks	–	224,790	–
4	Deferred charges	–	870,034	512,300
	Deposits—			
5	Trust accounts	–	–	–
	Dominion Government—			
6	Annual subsidy	–	–	–
7	Common school fund	–	–	–
8	Grant for Government B.N.A. Act	–	–	–
9	Grant per capita	–	–	–
10	Provincial debt account	775,792	1,055,430	529,300
11	Land account	117,597	–	–
12	Other	–	–	–
13	School Land Trust Fund	–	–	–
14	Drainage, irrigation and judicial districts	–	–	–
	Investments—			
15	Debentures	–	–	–
16	Farm Loan Board	–	–	–
17	Railway	–	4,447,000	1,246,432
18	Rural credit loans	–	–	–
19	Sinking funds	614,643	3,741,377	6,632,428
20	Other investments	–	254,111	–
21	Secured accounts	–	–	–
	Lands—			
22	Crown lands, amounts outstanding and interest	–	–	–
23	Farm Settlement Board, land	–	–	1,161,619
24	Lands, former Indian reservations	–	–	–
25	Other lands, including Soldiers' Land Act, Railway subsidy, land repurchased and Fairview works	–	–	–
	Loans and advances—			
26	Advances, educational purposes	–	–	–
27	Advances, trust accounts, etc	–	–	–
28	Aids to agriculture, livestock and dairying	–	–	–
29	Co-operative creameries	–	–	–
30	Co-operative elevator companies	–	–	–
31	Loans to banks	–	–	–
32	Other advances	–	101,916	–
33	Other loans	–	14,000	–
34	Power Commission temporary loan	–	13,108,115	–
35	Railways	–	–	–
36	Seed grain advances	–	–	–
	Housing Act—			
37	Advances to municipalities	34,000	960,352	811,204
38	Cash in banks and bonds	–	16,648	113,796
39	Farm loans and Co-operative Wheat Producers	–	–	–
40	Wheat Pool	–	–	–
41	Liquor Commission assets	–	–	–
	Unemployment relief—			
42	Receivable from Dominion Government	–	–	–
43	Relief account, accounts receivable	–	–	–
44	Municipal share direct relief	–	–	–
45	To be paid from revenue, ten instalments	–	–	–
46	Relief to municipalities	–	–	–
47	Patriotic purposes, expenditure for	–	–	–
48	Revenue earned but uncollected	–	–	–
49	Trust funds, cash for railway bond holders	–	–	575,853
	Utilities under provincial ownership—			
50	Grain elevators	–	–	–
51	Hydro-electric power	–	–	6,258,241
52	Telephones	–	57,585	–
53	Other principal assets	–	703,832	50,000
	Totals, Principal Assets	**1,542,032**	**28,123,835**	**19,621,623**
	Miscellaneous Assets[1]	–	**35,824,630**	**49,102,855**
	Resources	–	–	–

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[1] The main items of "miscellaneous assets" are "roads and bridges" and "Provincial Government buildings, sites and works" but included under this head are such minor assets as demonstration farms,

their respective fiscal years ended 1932, or their latest fiscal years.

as recorded in the Provincial Public Accounts.

Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	No.
1931.	1932.	1932.	1932.	1932.	1932.	
$	$	$	$	$	$	
6,758,967	4,760,399	2,462,628	6,565,060	2,704,633	9,185,771	1
–	–	–	1,820,231	2,407,157	–	2
2,220,729	15,709,648	1,020,659	50,600	1,828,960	1,751,446	3
–	–	–	1,846,933	117,478	–	4
5,424,845	–	–	–	–	686,858	5
42,579,184	2,848,290	–	–	3,800,000	–	6
1,189,973	1,454,481	–	–	–	–	7
–	4,800,000	–	–	–	–	8
–	51,180,196	–	–	9,415,264	–	9
–	–	7,631,684	8,107,500	8,107,500	–	10
–	–	–	–	11,705,680	–	11
1,075,604	3,263	–	–	–	–	12
–	–	5,927,486	32,853,612	18,136,734	–	13
–	–	8,226,697	64,542	144,718	618,079	14
–	48,630,341	–	–	5,192,746	–	15
–	–	6,476,048	14,908,712	–	58,109	16
–	–	–	–	–	–	17
–	–	1,103,389	–	–	–	18
8,817,254	4,543,066	13.722,823	6,708,507	–	24,617,616	19
–	622,796	520,516	2,922,498	–	–	20
–	–	625,549	–	–	–	21
–	392,902	–	–	–	–	22
–	–	–	–	–	–	23
–	–	–	–	–	1,073,690	24
–	–	–	–	–	3,145,721	25
–	–	–	–	671,146	–	26
–	–	–	–	–	–	27
–	–	–	514,200	1,156,114	–	28
–	–	–	1,225,215	–	–	39
–	–	–	597,590	–	–	30
15,000,000	–	–	–	–	–	31
6,013,863	–	121,504	25,094	3,882,480	14,631,001	32
–	–	–	–	145,116	–	33
–	–	–	–	–	–	34
–	30,207,935	–	–	10,580,000	44,951,674	35
–	–	–	–	2,828,793	–	36
4,621,626	4,216,057	2,658,730	–	–	1,016,252	37
–	–	–	–	–	–	38
–	–	6,183,162	–	–	–	39
–	–	–	13,577,000	5,651,187	–	40
3,564,136	–	–	–	–	–	41
1,476,379	–	370,483	–	–	–	42
–	–	–	13,152,710	–	–	43
–	3,139,750	491,717	–	–	–	44
–	–	1,131,254	–	–	–	45
2,150,044	–	18,200	–	1,144,972	–	46
–	–	1,338,798	–	–	–	47
–	–	5,385	–	–	–	48
–	–	–	–	–	–	49
–	–	705,439	–	–	–	50
6,762,080	189,635,191	5,320,564	6,061,000	–	–	51
–	–	22,979,473	12,772,417	29,102,671	–	52
2,318,567	146,816	1,695,655	1,880,079	4,052,884	–	53
109,973,251	**362,291,131**	**90,737,843**	**125,653,500**	**122,776,233**	**101,736,217**	
74,227,413	**247,436,596**	**47,535,950**	**54,282,405**	**85,443,817**	**94,006,613**	
–	**691,250,000**[2]	**15,501,322**[3]	–	**32,837,560**[3]	–	

plant, livestock, equipment, unemployment relief works, etc. [2] Nearly 84 p.c of the "resources" assets shown for Ontario are in the form of pulpwood and timber resources. [3] This item is for unsold school lands only, other resources not being shown.

Section 3.—Municipal Public Finance.[1]

The existence of local self-governing units has always been characteristic of democratic societies, and nowhere more so than in Canada. The struggle for responsible government was naturally accompanied by an agitation for local self-government in the cities and towns of Canada and, after responsible government had been conceded, a complete system of municipalities was established throughout the old Province of Canada by the Municipal Act of 1849.[2] Under the division of powers made by the British North America Act between the Dominion and the Provincial Governments, legislation regarding municipal government, being a local matter, was naturally assigned to the provinces, which differ considerably with regard to their types of municipal organization. Thus in Prince Edward Island the only incorporated municipalities are the city of Charlottetown and seven incorporated towns. In British Columbia seven of the 33 cities have fewer than 1,000 people, while there are no towns at all and only sixteen villages; again, in the same province the rural districts are mainly administered from the provincial capital, there being only 28 rural municipalities. Finally, in Saskatchewan and Alberta there exist local improvement districts, areas which have not as yet been organized into rural municipalities, and where the taxes are levied, collected and expended by the Provincial Governments. Such districts, however, may be regarded as on the way to become self-governing rural municipalities and their statistics are therefore included in Table **31**, which gives statistics of the numbers and types of municipalities in 1931.

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[1] Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues statements on "Financial Statistics of Urban Municipalities of 10,000 Population and Over", on "Bonded Indebtedness of Municipalities" and on "Assessment Valuations of Municipalities". For a list of publications see Chapter XXIX, Section 1, under "Finance".

[2] For a brief outline of the rise of the municipal system of Ontario, see 1922-23 Year Book, p. 108.

31.—Number of Municipalities in Canada, by Provinces and Classes, 1931.

Province.	Cities.	Towns.	Villages.	Counties.	Other Rural Municipalities.	Local Improvement Districts.	Suburban Municipalities.	Total.
P.E. Island	1	7	–	–	–	–	–	8
Nova Scotia	2	43	–	[3]	24	–	–	69
New Brunswick	3	20	2	15	–	–	–	40
Quebec	25	98	300	74	1,012	–	–	1,509
Ontario	28	146	156	38[1]	571[2]	–	–	939
Manitoba	4	30	22	–	113	–	5	174
Saskatchewan	8	80	385	–	302	83	–	858
Alberta	7	54	145	–	166	234	–	606
British Columbia	33	–	16	–	28	–	–	77
Canada	**111**	**478**	**1,026**	**127**	**2,216**	**317**	**5**	**4,280**

[1] There are 44 counties in all, geographically, but a number are united for municipal purposes.

[2] Officially known as townships.

[3] Nova Scotia has eighteen counties, some of which are "municipalities", while others are divided into "municipalities".

Municipal Assessments.—Throughout the Dominion, the chief basis of municipal tax revenue is the real estate within the limits of the municipalities; though in certain provinces personal property, income, and business carried on are also taxed. General taxes are normally assessed at the rate of so many mills on the dollar of the assessed valuations. In the Prairie Provinces, the values of improvements made to real property are often rated at a very low figure, *e.g.*, in Saskatchewan, where the taxable valuations of buildings are about 12 p.c. of the taxable valuations of lands, and in Alberta, where they are about 27 p.c. of the taxable valuations of lands, as shown in Table **32.**

There are various reasons for fluctuations in assessment valuations, due to differences in laws and varying practices with regard to assessment as among provinces, as among classes of municipalities and as among municipalities of the same class from year to year. Such matters are more fully dealt with in the special report of the Bureau on "Assessment Valuations by Provinces", obtainable on request.

Land valuations in the West, which in earlier years were somewhat inflated, have of late been assessed on a sounder basis, and in some provinces the Equalization Boards have placed a more equitable valuation on lands as among the various rural municipalities.

32.—Summary Statement Showing Total Assessment Valuations of Municipalities, by Provinces, for 1929, 1930 and 1931.

Province.		Taxable Real Property.		
		Land.	Buildings.	Total.
		$	$	$
Prince Edward Island	1929	–	–	30,842,925
	1930	–	–	31,492,665
	1931	–	–	32,595,794
Nova Scotia	1929	–	–	136,915,454[3]
	1930	–	–	138,202,162[3]
	1931	–	–	140,107,075[3]
New Brunswick	1929	–	–	158,569,642
	1930	–	–	126,468,634
	1931	–	–	130,053,404
Quebec	1929	–	–	2,354,494,461
	1930	–	–	2,451,644,179
	1931	–	–	2,210,942,541
Ontario	1929	1,291,803,654	1,383,517,323	2,675,320,977
	1930	1,314,778,176	1,444,419,193	2,759,197,369
	1931	1,327,606,008	1,484,157,227	2,811,763,235
Manitoba	1929	–	–	540,852,995
	1930	–	–	541,847,002
	1931	–	–	539,012,367
Saskatchewan	1929	974,028,206	109,745,019	1,083,773,225
	1930	976,232,540	115,066,876	1,091,299,416
	1931	972,490,470	117,238,924	1,089,729,394
Alberta	1929	454,224,514[4]	107,405,626[4]	561,630,140[6,4]
	1930	525,513,056	119,904,827	645,417,883
	1931	456,099,459[4]	123,860,646[4]	579,960,105[4]
British Columbia	1929	307,514,698	352,814,469	660,329,167
	1930	307,772,090	374,218,299	681,990,389
	1931	303,667,022	384,429,061	688,096,083
Totals, All Provinces	**1929**	**3,027,571,072[1,4]**	**1,953,482,437[1]**	**8,202,728,986[3,4]**
	1930	**3,124,295,862[1]**	**2,053,699,195[1]**	**8,467,559,699[3]**
	1931	**3,059,862,959[1,4]**	**2,109,685,858[1]**	**8,222,259,998[3,4]**

For footnotes see end of table, p. 866.

32.—Summary Statement Showing Total Assessment Valuations of Municipalities, by Provinces, for 1929, 1930 and 1931—concluded.

Province.		Personal Property.	Income.	Other Taxable Valuations.	Total Taxable Valuations.	Exempted Property.
		$	$	$	$	$
Prince Edward Island	1929	6,820,658	536,020	75,850	38,275,453	1,944,000
	1930	7,413,475	425,016	57,030	39,388,186	1,984,000
	1931	6,336,017	287,134	83,495	39,302,440	1,828,000
Nova Scotia	1929	24,118,744[2,3]	1,698,572[2,3]	–	162,638,650[3]	40,135,244
	1930	23,986,731[2,3]	1,716,970[2,3]	–	163,831,573[3]	45,163,617
	1931	24,383,477[2,3]	1,522,600[2,3]	11,267,770	177,215,514[3]	48,119,429
New Brunswick	1929	28,597,163	–	–	187,166,805	–
	1930	23,111,956	–	–	149,580,590	–
	1931	23,511,406	–	–	153,564,810	–
Quebec	1929	–	–	14,791,807	2,369,286,268	637,990,363
	1930	–	–	13,489,102	2,465,133,281	668,244,770
	1931	–	–	12,536,139	2,223,478,680	706,128,166
Ontario	1929	–	119,218,961	219,323,197	3,013,863,135[5]	488,724,668
	1930	–	135,092,197	232,243,536	3,126,533,102[5]	510,504,102
	1931	–	131,335,748	240,053,432	3,183,152,415[5]	536,535,708
Manitoba	1929	10,296,733	–	10,439,762	561,589,490	144,991,311
	1930	11,273,173	–	10,573,874	563,694,049	147,666,868
	1931	7,656,667	–	10,434,095	557,103,129	156,793,923
Saskatchewan	1929	–	2,473,384[6]	45,599,072	1,131,845,681	–
	1930	–	2,048,005[7]	46,067,839	1,139,415,260	–
	1931	–	1,205,209[8]	43,526,172	1,134,460,775	–
Alberta	1929	–	–	8,981,640[4]	570,611,780[4]	–
	1930	–	–	10,785,735	656,203,618	–
	1931	–	–	15,785,012[4]	595,745,117[4]	–
British Columbia	1929	–	–	–	660,329,167	81,303,065
	1930	–	–	–	681,990,389	87,373,370
	1931	–	–	–	688,096,083	149,274,900
Totals, All Provinces	**1929**	**69,833,298[2,3]**	**123,926,937[2,3]**	**299,211,328**	**8,695,606,429[3,5]**	**1,395,088,651**
	1930	**65,785,335[2,3]**	**139,282,188[2,3]**	**313,217,116**	**8,985,770,048[3,5]**	**1,460,936,727**
	1931	**61,887,567[2,3]**	**134,350,691[2,3]**	**333,686,115**	**8,752,118,963[3,5]**	**1,598,349,761**

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[1] Less land and buildings for the Maritime Provinces, Quebec and Manitoba. [2] In N.S. personal property and income assessments for cities are for Sydney only. [3] Includes exemptions for municipality of Cumberland, Nova Scotia. [4] Local Improvement Districts not included in 1929 or 1931 in Alta. [5] In addition, assessments for schools only in Ontario were: townships $2,730,538, towns and villages $23,719,597 and cities $92,401,140 in 1929; townships $3,125,660, towns and villages $22,347,193 and cities $86,780,452 in 1930; and townships $4,486,690, towns and villages $2,049,195 and cities $93,816,472 in 1931. [6] $256,400 is by special franchise. [7] $484,736 is by special franchise. [8] $441,660 is by special franchise.

Bonded Indebtedness.—Like other Canadian governing bodies, the municipalities of the greater part of Canada borrowed rather freely during the boom period of 1900-12, and again during the nineteen-twenties. The bonded indebtedness of Ontario municipalities rose from $153,568,409 in 1913 to $499,002,074 in 1931, while that of Quebec municipalities increased from $132,078,584 in 1914 to $362,132,334 in 1931, and a proportionate increase took place in other provinces. The recent growth in the bonded indebtedness of all classes of municipalities is shown by provinces in Table **33**. The figures show that there was an increase in 1931 over 1930 in each of the provinces. In Saskatchewan, net debenture debt is shown for all municipalities in 1925 and 1926, while from 1927 to 1931 the statistics represent gross debenture debt. In Alberta, the statistics given represent principally net debenture debt in 1925 to 1928, while in 1929, 1930 and 1931 gross debenture debt is given. All other provinces give total debenture debt throughout.

33.—Total Bonded Indebtedness of All Classes of Municipalities, by Provinces, 1919-31.

Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
1919	970,100	17,863,881	11,128,467	171,168,650	243,226,877
1920	1,086,500	19,192,462	10,841,466	190,204,326	269,727,271
1921	1,202,200	22,451,743	7,578,567	194,877,251	317,613,283
1922	1,254,900	23,541,759	10,025,633	207,883,993	349,276,606
1923	1,290,800	24,248,782	7,974,362	214,260,791	376,512,002
1924	1,143,550[1]	25,348,664	17,350,225[2]	230,424,908	430,010,501
1925	1,163,050[1]	25,722,635	10,660,863[2]	231,358,779	405,178,853
1926	1,247,545[1]	26,281,152	17,091,550[2]	246,541,730	413,474,813
1927	1,452,425[1]	28,381,616	15,707,699[2]	260,435,420	434,464,056
1928	1,515,125[1]	29,049,412	19,365,535[2]	278,864,744	435,912,807
1929	1,598,624[1]	29,029,119	21,129,540[2]	293,557,500	451,936,592
1930	1,863,211[1]	30,182,264	20,565,998[2]	323,395,745	485,280,182
1931	1,959,672[1]	31,386,025	21,477,521[2]	362,132,334	499,002,074

Year.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	$	$	$	$	$
1919	55,562,788	39,585,388	66,870,464	94,741,615	701,118,230
1920	57,820,588	34,989,751	57,205,275	96,107,911	737,175,550
1921	65,463,239	35,040,336	53,429,558	97,495,984	795,152,161
1922	68,811,040	52,787,655	60,832,650	98,761,630	873,175,866
1923	73,908,963	51,709,772	70,999,611	96,273,987	917,179,070
1924	73,944,105	49,448,911	65,414,317	96,106,151	989,191,332[3]
1925	79,211,867	46,732,040	57,908,593	99,055,201	956,991,881[3]
1926	80,716,272	44,769,529	56,950,712	102,853,228	989,926,531[3]
1927	83,017,302	54,361,158	62,414,660	107,376,118	1,047,610,454[3]
1928	85,651,906	53,092,330	63,428,853	110,124,819	1,077,005,531[3]
1929	85,901,404	54,913,100	78,473,392	118,483,618	1,135,022,889[3]
1930	84,879,707	59,000,183	78,645,803	125,832,088	1,209,645,181[3]
1931	91,615,195	59,146,704	78,679,571	129,913,890	1,275,312,986[3]

[1] Figures represent Charlottetown and Kensington 1924-31; Montague for 1925-31; Summerside, Souris Georgetown and Alberton 1926-31.

[2] New Brunswick figures are for 3 cities, 18 towns, 2 villages and 15 counties in 1924; 2 cities, 13 towns, 2 villages and 15 counties in 1925; 3 cities, 18 towns, 1 village and 15 counties in 1926; 3 cities, 23 towns, 4 villages and 15 counties in 1927, 1928 and 1929; 3 cities, 19 towns, 2 villages and 15 counties for 1930 and 3 cities, 20 towns, 2 villages and 15 counties in 1931.

[3] See footnotes 1 and 2.

34.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 and over, 1931.

Province and City.	Area.	Populations as Furnished by Municipalities.	Total Assessed Value of Taxable Property.	Grand Total Receipts.	Grand Total Expenditures.	Total Assets.	Total Liabilities.
	acres.	No.	$	$	$	$	$
Prince Edward Island—							
Charlottetown	830	12,387	8,734,478	297,211	320,318	2,684,798	2,011,674
Nova Scotia—							
Halifax	4,400[1]	59,275	58,628,120	4,727,516	4,727,517	18,523,812	18,523,811
Sydney	3,730[1]	23,089	12,925,815	1,903,382	1,903,383	6,208,243	6,208,243
Glace Bay	6,200[2]	20,706	5,312,400	1,046,383	1,137,189	2,584,206	1,914,103
New Brunswick—							
Saint John	13,440	47,514	53,030,800	3,541,530	3,206,589	14,878,558	10,162,416
Moncton	2,093	20,689	25,019,970	1,447,945	1,447,945	6,304,203	5,781,510

For footnotes see end of table, p. 868.

34.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 and over, 1931—concluded.

Province and City.	Area.	Populations as Furnished by Municipalities.	Total Assessed Value of Taxable Property.	Grand Total Receipts.	Grand Total Expenditures.	Total Assets.	Total Liabilities.
	acres.	No.	$	$	$	$	$
Quebec—							
Montreal	32,155	1,127,949	979,629,413	127,243,889	126,892,447	219,637,022	298,060,110
Quebec	5,754	139,846	120,282,142	14,544,189	15,280,925	34,696,166	37,707,018
Verdun	1,426	60,745	40,734,010	4,026,445	4,074,317	8,217,394	11,482,795
Three Rivers	2,560	40,000	25,662,300	5,851,486	5,865,547	12,139,828	12,316,382
Hull	4,000	29,432	21,088,419	1,552,684	1,561,651	4,860,803	4,992,672
Sherbrooke	3,104	28,777	26,848,471	4,603,814	4,544,264	13,204,065	10,451,276
Outremont	975	27,850	42,195,480	2,393,134	2,467,404	6,290,956	8,806,155
Westmount	976	26,008	72,387,706	3,084,395	3,098,768	11,106,662	13,693,735
Lachine	2,996	19,194	27,081,943	1,561,379	1,576,134	6,929,638	8,270,531
Shawinigan Falls	1,280	15,571	25,257,731	1,894,603	1,972,708	4,670,038	5,247,225
St. Hyacinthe	1,091	14,008	12,692,386	723,423	737,649	1,928,613	1,751,090
St. Jean	1,331	12,500	11,738,249	512,246	518,507	1,995,399	1,619,024
Valleyfield	358	11,869	5,057,135	490,726	506,326	1,016,617	984,503
Chicoutimi	1,700	11,684	7,601,878	1,658,720	1,669,606	2,518,733	2,653,356
Lévis	2,222	11,594	5,921,385	493,733	470,328	1,619,670	1,532,633
Joliette	1,288	11,419	5,665,964	462,676	445,150	2,168,639	1,539,499
Granby	960	10,700	5,575,008	241,644	413,407	1,309,136	1,096,335
Sorel	2,000	10,312	3,812,475	369,913	372,925	1,309,742	1,580,733
Thetford Mines	2,080	10,148	6,353,500	364,785	369,126	1,000,113	684,209
Ontario—							
Toronto	17,176	621,596	1,050,204,850	43,771,204	44,079,756	213,444,397	205,479,613
Hamilton	9,272	150,065	169,871,150	9,208,795	9,311,409	62,111,063	42,255,972
Ottawa	4,120	127,332	161,535,392	7,032,697	7,051,480	38,848,735	28,016,891
London	7,231	71,310	86,434,396	4,046,574	4,032,647	20,039,074	17,858,045
Windsor	3,209	68,079	89,926,950	4,160,821	5,057,296	19,749,080	17,302,704
Kitchener	2,933	31,114	26,530,907	1,643,726	1,640,173	7,264,144	5,004,187
Brantford	3,159	30,153	28,374,755	1,682,784	1,741,289	7,071,176	6,644,900
St. Catharines	1,900	25,645	24,732,130	1,455,248	1,432,329	6,462,665	6,229,178
Fort William	9,865	24,470	32,857,156	1,565,513	1,530,399	12,511,336	12,287,661
Oshawa	3,356	23,687	16,672,940	1,148,730	1,155,703	5,612,124	5,591,241
Sault Ste. Marie	4,900	23,079	19,341,922	1,063,336	1,069,494	7,287,698	6,620,336
Peterborough	2,848	22,798	24,835,934	1,093,550	1,117,608	8,797,710	7,253,806
Kingston	2,993	22,534	17,274,687	1,126,952	1,058,330	4,879,620	4,088,251
Guelph	3,104	21,201	14,200,358	1,333,713	1,287,905	8,083,449	4,715,892
Sudbury	2,560	20,100	12,386,147	749,724	1,014,309	4,646,886	4,021,650
Port Arthur	8,700	19,430	26,899,590	1,349,214	1,295,895	14,282,734	12,948,770
Niagara Falls	1,655	18,678	18,434,048	1,267,287	1,287,841	4,418,185	4,331,710
Stratford	2,835	18,626	15,276,098	832,398	827,040	6,597,545	4,102,102
Sarnia	1,770	17,540	18,368,787	1,076,548	1,042,880	4,683,844	3,222,171
St. Thomas	1,800	16,582	17,177,209	877,770	1,010,143	4,561,530	2,332,691
Chatham	1,650	16,434	14,345,812	775,368	796,812	2,250,810	1,311,020
North Bay	2,100	16,353	9,962,742	770,286	746,876	3,365,600	3,189,693
East Windsor	1,677	16,081	21,693,590	1,085,842	959,012	6,142,195	5,897,667
Galt	1,600	13,960	11,205,235	680,373	677,920	4,870,230	4,264,554
Belleville	1,800	13,914	10,218,636	702,498	704,513	5,328,027	4,079,587
Timmins	852	13,367	6,390,566	627,774	579,941	3,478,788	1,310,286
Owen Sound	2,909	12,673	8,693,357	596,437	645,255	1,431,390	2,135,042
Sandwich	2,035	11,408	15,986,461	741,191	679,721	4,078,163	3,929,253
Walkerville	1,000	11,351	16,825,827	908,609	1,014,094	4,687,542	3,878,944
Cornwall	577	11,082	9,337,410	446,123	343,236	1,480,822	863,340
Woodstock	1,525	10,840	7,740,527	572,481	475,741	2,362,558	1,481,171
Welland	1,100	10,338	9,790,935	536,379	553,635	4,347,621	2,613,077
Manitoba—							
Winnipeg	15,961	218,785	246,103,836	–	–	30,047,537[3]	65,741,780[4]
Brandon	5,428	17,082	13,598,989	–	–	2,396,091[3]	3,397,376[4]
St. Boniface	11,641	16,305	13,488,941	–	–	2,438,261[3]	4,871,396[4]
Saskatchewan—							
Regina	8,408	53,209	47,468,222	6,921,302	7,137,823	25,019,706	18,928,971
Saskatoon	8,000	43,291	34,670,600	5,611,048	5,789,563	18,350,785	17,922,984
MooseJaw	9,760	21,299	20,663,110	1,650,228	1,998,882	12,338,578	7,798,368
Alberta—							
Calgary	25,920	83,761	70,530,989	5,463,300	5,659,417	–	30,385,317
Edmonton	28,200	79,197	66,496,485	6,955,533	6,716,547	–	42,396,880
Lethbridge	6,944	13,489	10,548,630	840,903	777,487	–	4,452,942
Medicine Hat	10,880	10,300	9,900,130	857,588	748,375	–	2,436,215
British Columbia—							
Vancouver	27,965	246,593	374,524,630	14,867,761	15,745,006	–	84,603,726
Victoria	4,637	39,082	59,354,820	2,731,208	3,114,267	–	17,935,832
New Westminster	3,481	17,524	22,209,681	1,237,108	1,331,604	–	7,018,552

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[1] For the year 1925. [2] Census 1921. [3] Arrears of taxes and sinking fund. [4] Debentures outstanding.

Section 4.—National Wealth and Income.

Subsection 1.—National Wealth.

There are several methods of computing national wealth, *i.e.*, the aggregate value of the public and private property within the nation apart from undeveloped natural resources. Perhaps the most familiar of these methods is that of working back to capital values through income tax returns, but this can be applied only in countries where all incomes are thoroughly appraised. A second method is that of estimation from probate returns, the value of the estates of deceased persons being regarded as representative. A third is that of a complete census, based upon a canvass of the individual. In the accompanying tables a fourth method, namely, the so-called "inventory" method, is employed; it consists in totalling the amounts known from various sources to be invested in agriculture, manufactures, dwellings, etc.

Whatever method is used, difficulty arises when we try to reduce all the things which go to make up wealth (things which once created are not themselves subject to violent change) to a common denominator. Estimates of national wealth must always be expressed in terms of the national currency and thus normally in terms of gold dollars. Yet the purchasing power of the currency unit is always fluctuating and since 1929 has increased by more than 50 p.c. in terms of wholesale prices. Even in 1930, the average index number of wholesale prices was down by nearly 10 p.c. from 1929, while in December of that year the average index number of wholesale prices was 19 p.c. lower than in the same month of 1929.

The effect of such drastic reductions in values is first felt by the commodities which are being currently produced and, through these commodities, the dollar value of production is diminished and consequently the national income of a country where most people are producers. Ultimately a persistent decline of this character affects the capital values of real estate, buildings, machinery, etc., and its influence is then felt in a reduction in the national wealth as stated in dollars. The 1929 estimate, which is considered to represent values in that year with approximate accuracy, is the latest which has been compiled by the Bureau of Statistics and the table below shows the national wealth on that basis.

The survey for 1929 placed the estimated aggregate of the tangible wealth of the Dominion, exclusive of undeveloped natural resources, at $30,840,000,000 as compared with $29,630,000,000 in 1928,[1] $27,668,000,000 in 1927, $26,691,482,000 in 1926, $25,673,174,000 in 1925 and $22,195,302,000 in 1921. These figures, however, are not exactly comparable, in view of certain improvements and additions that have been made in the method of estimation and in the items included. An increase of $1,210,000,000 was shown in the national wealth in the year 1929, and of over $8,600,000,000 in the eight years 1921 to 1929.

Aggregate and Per Capita Wealth of the Provinces, 1929.—As regards the provincial distribution of wealth, Ontario ranked first with estimated aggregate wealth of $10,628,000,000 or 34·46 p.c. of the total and Quebec second with estimated wealth of $8,265,000,000 or 26·8 p.c. of the whole. Saskatchewan was third, with estimated wealth of $3,047,000,000 or 9·88 p.c. of the total for the Dominion.

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[1] Revised figures.

While Ontario led in absolute wealth, the western provinces came first in per capita wealth; British Columbia held first rank with a per capita wealth of $4,012; Alberta second with $3,518; Saskatchewan third with $3,451 and Manitoba sixth with $2,910. These figures may be compared with $3,188 and $2,982, the per capita wealth of Ontario and Quebec respectively, and $3,076, the per capita wealth for the whole Dominion. Further details are furnished in Table 35.

As the statistics of population and wealth for Yukon are uncertain, the per capita estimate of wealth is open to question and has not been shown.

35.—Provincial Distribution of the National Wealth of Canada, with Percentage and Per Capita Analyses, 1928 and 1929.

NOTE.—Figures for 1921 and 1925 are given on pp. 849-850 of the 1927-28 Year Book, for 1926 on p. 827 of the 1930 Year Book and for 1927 on p. 870 of the 1931 Year Book.

Province.	Estimated Wealth.	Percentage Distribution of Wealth.	Estimated Population June 1.	Percentage Distribution of Population.	Wealth per capita.[4]
	$	p.c.	No.	p.c.	$
1928.					
Prince Edward Island	157,000,000[3]	0·53	88,000	0·89	1,784
Nova Scotia	899,000,000[3]	3·03	515,000	5·24	1,746
New Brunswick	821,000,000[3]	2·77	401,000	4·08	2,047
Quebec	7,506,000,000[3]	25·34	2,715,000	27·61	2,765
Ontario	10,155,000,000[3]	34·27	3,278,000	33·34	3,098
Manitoba	1,973,000,000[3]	6·66	664,000	6·75	2,971
Saskatchewan	3,100,000,000[3]	10·46	862,000	8·77	3,596
Alberta	2,378,000,000[3]	8·03	658,000	6·69	3,614
British Columbia	2,622,000,000[3]	8·85	641,000	6·52	4,090
Yukon	19,000,000[3]	0·06	4,000	0·04	[2]
Totals	**29,630,000,000**[3]	**100·00**	**9,833,000**[1]	**100·00**[1]	**3,013**
1929.					
Prince Edward Island	164,000,000	0·53	88,000	0·88	1,864
Nova Scotia	911,000,000	2·95	515,000	5·14	1,769
New Brunswick	788,000,000	2·56	404,000	4·03	1,950
Quebec	8,265,000,000	26·80	2,772,000	27·64	2,982
Ontario	10,628,000,000	34·46	3,334,000	33·25	3,188
Manitoba	1,970,000,000	6·39	677,000	6·75	2,910
Saskatchewan	3,047,000,000	9·88	883,000	8·81	3,451
Alberta	2,406,000,000	7·80	684,000	6·82	3,518
British Columbia	2,644,000,000	8·57	659,000	6·57	4,012
Yukon	17,000,000	0·06	4,000	0·04	[2]
Totals	**30,840,000,000**	**100·00**	**10,027,000**[1]	**100·00**[1]	**3,076**

[1] Includes 7,000 population in the Northwest Territories or 0·07 p.c.

[2] As the statistics of population and wealth for Yukon are uncertain, the per capita estimate of wealth is open to question and has not been shown. [3] Revised figures. [4] Per capita figures are worked out on the basis of revised populations, see p. 145.

Wealth of Canada, by Items, 1929.—In the items included in Table 36, all duplications have been excluded. In any consideration of the individual items it should be remembered that each item covers only the portion of wealth which is mentioned in the description of the item. For example, the item of fisheries includes only capital invested in primary operations, while capital invested in fish-canning and -curing establishments is included under manufactures, though it might also be considered as part of the wealth connected with fisheries. In the same way, the items for manufactures do not include lands and buildings in urban centres, which are shown under the heading of urban real property.

The total agricultural wealth in 1929 was $7,939,477,000, being 25·74 p.c. of the whole. This amount included the value of agricultural production in 1929, or $1,631,124,000, to cover the average stocks of agricultural goods in the possession of farmers and traders and the amount invested in preparation for the new crop.

The largest element in the national wealth was urban real property, which in 1929 attained first place although it was previously second to agriculture. This item included the assessed valuations of taxed and exempted property, to which was added one-third to provide for undervaluation by assessors and for roads, bridges and sewers. The estimated value, as based on returns for 1929 received in the Bureau, was $8,251,011,000 or 26·75 p.c. of the total wealth of the Dominion.

The wealth invested in steam railways, computed from the cost of road and equipment, and distributed by provinces on the basis of mileage, constituted the third largest item, amounting to $3,153,351,000 or 10·22 p.c. of the total.

Another important item is the tangible value of the forests, amounting to $1,877,000,000 or 6·09 p.c., and including the estimated value of accessible raw materials, pulpwood, and capital invested in woods operations. In 1929, as in previous years from 1926, this item included an estimate of the value of young growth, accounting for an increase in the estimates for these years comparedwith 1925.

The value of machinery and tools in manufacturing establishments and of lands and buildings of manufacturing concerns in rural districts was estimated at $1,418,040,000 in 1929 or 4·60 p.c. In addition the estimated value of materials on hand and stocks in process in manufacturing establishments was set at $837,805,000 in 1929 or 2·72 p.c. In 1925 this item included an estimate for stocks of manufactured goods in the hands of dealers, but in the present statement this is included in the item for trading establishments, which shows the estimated value of furniture and fixtures, delivery equipment, and materials and stocks on hand in 1929 as $1,136,291,000 or 3·68 p.c. of the total. Three additional classes of wealth have been included in the estimate for 1929 which were not taken account of in earlier estimates. To this extent, and on account of the later revision of earlier figures, the totals of this and other years are not comparable. The three classes so included are harbours, highways and aircraft. The $367,488,000 credited to harbours represents the approximate capital expenditures for harbour works such as wharves, piers, breakwaters, dredging or other harbour and river improvements. The investment in certain piers and wharves connected with the fishing industry is, however, included under the item "Fisheries". The amount credited to highways is estimated on a conservative basis, and is not intended to be all-inclusive, but is considered the best estimate that can be made from existing data. The value of aircraft is taken as the original cost of the aircraft registered in the different provinces less an allowance for depreciation worked out with the co-operation of the Air Service Branch of the Department of National Defence. The resulting estimate of $2,398,000 is included with "shipping".

On the basis of the estimated population of 1929 of 10,027,000, the per capita investment in urban real estate was $823, in agriculture $792, in steam railways $314, in the forests $187 and in household furnishings and personal property $137. The per capita wealth of all kinds was $3,076. Further details of the items are presented in Table **36**.

36.—Estimate of the National Wealth of Canada, with Percentage and Per Capita Distribution of Component Items, 1929.

Classification of Wealth.	Aggregate Amount.	Percentage of Total.	Average Amount per head of Population.[3]
	$	p.c.	$
Farm Values (land, buildings, implements, machinery and live stock)	6,308,353,000	20·45	629·14
Agricultural Products in the possession of farmers and traders	1,631,124,000	5·29	162·67
Totals, Agricultural Wealth	7,939,477,000	25·74	791·81
Mines (capital employed)	867,021,000	2·81	86·47
Forests (estimated value of accessible raw materials, pulpwood and capital invested in woods operations)	1,877,000,000	6·09	187·19
Fisheries (capital invested in boats, gear, etc., in primary operations)	33,935,000	0·11	3·39
Central Electric Stations (capital invested in equipment, materials, etc.)	554,327,000	1·80	55·28
Manufactures (machinery and tools, and estimate for capital in rural lands and buildings, duplication excluded)	1,418,040,000	4·60	141·42
Manufactures (materials on hand and stocks in process, duplication excluded)	837,805,000	2·72	83·55
Construction, Custom and Repair (estimate of capital invested in machinery and tools and materials on hand)	137,685,000	0·45	13·73
Trading Establishments (estimate of the value of furniture and fixtures, delivery equipment and materials on hand)	1,136,291,000	3·68	113·32
Steam Railways (investment in road and equipment)	3,153,351,000	10·22	314·49
Electric Railways (investment in road and equipment)	240,111,000	0·78	23·95
Telephones (cost of property and equipment)	291,589,000	0·95	29·08
Urban Real Property (assessed valuations and exempted property and estimate for undervaluation by assessors and for roads, sewers, etc.)	8,251,011,000	26·75	822·88
Canals (amount expended on construction to Mar. 31, 1930)	241,946,000	0·79	24·13
Harbours (approximate amount expended to Mar. 31, 1930)[1]	367,488,000	1·19	36·65
Shipping (including aircraft)[2]	149,306,000	0·48	14·89
Imported Merchandise in store (estimated at one-half imports during 1929)	649,477,000	2·11	64·77
Automobiles (estimate of the value of automobiles registered)	758,424,000	2·46	75·64
Highways, etc.[1]	364,896,000	1·18	36·39
Household Furnishings, Clothing, etc. (value estimated from production and trade statistics)	1,370,000,000	4·44	136·63
Specie, Coin and other Currency held by the Government, chartered banks and the general public	201,030,000	0·65	20·06
Grand Totals	**30,840,210,000**	**100·00**	**3,075·72**

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[1] This class of wealth was not included in estimates published for previous years in earlier editions of the Year Book.

[2] The total for "shipping" includes, for the first time, an estimate for aircraft amounting to $2,398,000 for 1929.

[3] See Table 35 for the revised estimate of population upon which these per capita figures are based.

Analyses by Provinces and Classes of Wealth.—In Table **37** will be found detailed statistics of the wealth of each province by leading items. Again the suggestive character rather than the strict accuracy of such data must be emphasized. The specie holdings, for instance, are distributed among the provinces according to their populations, since they are an asset of Canada as a whole rather than of the particular locality in which they happen to be deposited.

37.—Estimate of National Wealth of Canada, 1929, by Provinces and Classes.

Note.—For a fuller description of the various items, see the table immediately preceding.

Classification of Wealth.	Canada.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$	$
Farm values	6,308,353,000	67,015,000	134,725,000	141,130,000	1,133,343,000	1,778,476,000
Agricultural products	1,631,124,000	25,976,000	43,412,000	39,919,000	313,698,000	509,208,000
Totals, Agricultural Wealth	7,939,477,000	92,991,000	178,137,000	181,049,000	1,447,041,000	2,287,684,000
Mines	867,021,000	[1]	67,357,000	4,945,000	146,332,000	302,938,000
Forests	1,877,000,000	1,600,000	58,000,000	78,700,000	706,000,000	422,500,000
Fisheries	33,935,000	725,000	7,447,000	4,157,000	2,334,000	3,479,000
Central electric stations	554,327,000	447,000	8,397,000	13,775,000	221,135,000	221,421,000
Manufactures (machinery and tools, and estimate for capital in rural lands and buildings; duplication excluded)	1,418,040,000	1,301,000	36,778,000	40,221,000	439,539,000	661,790,000
Manufactures (materials on hand and stocks in process)	837,805,000	496,000	21,582,000	21,208,000	246,601,000	442,238,000
Construction, custom and repair	137,685,000	171,000	3,176,000	1,678,000	40,711,000	53,495,000
Trading establishments (fixtures and delivery equipment and materials on hand)	1,136,291,000	5,168,000	42,119,000	36,926,000	306,228,000	410,558,000
Steam railways	3,153,351,000	21,190,000	109,020,000	148,481,000	375,503,000	834,690,000
Electric railways	240,111,000	–	10,077,000	3,063,000	67,846,000	109,673,000
Canals	241,946,000	–	1,494,000	45,000	35,804,000	204,603,000
Telephones	291,589,000	766,000	8,457,000	5,369,000	60,227,000	117,340,000
Urban real property	8,251,011,000	13,954,000	181,262,000	98,894,000	3,190,295,000	3,032,338,000
Harbours	367,488,000	4,383,000	20,866,000	31,869,000	165,173,000	91,428,000
Shipping	149,306,000	882,000	13,417,000	3,615,000	54,167,000	39,284,000
Imported merchandise in store	649,477,000	786,000	17,846,000	13,225,000	169,125,000	334,034,000
Automobiles	758,424,000	3,949,000	25,354,000	20,360,000	105,785,000	347,267,000
Highways, etc	364,896,000	1,300,000	11,992,000	13,188,000	52,816,000	186,000,000
Household furnishings, clothing, etc.	1,370,000,000	12,052,000	77,043,000	58,692,000	376,591,000	457,903,000
Specie, coin and other currency held by the Government, chartered banks and the general public	201,030,000	1,768,000	11,305,000	8,612,000	55,260,000	67,191,000
Totals	**30,840,210,000**	**163,929,000**	**911,126,000**	**788,072,000**	**8,264,513,000**	**10,627,854,000**
Percentages	100·00	0·53	2·95	2·56	26·80	34·46

[1] Included in Nova Scotia.

37.—Estimate of National Wealth of Canada, 1929, by Provinces and Classes—concluded.

Classification of Wealth.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
	$	$	$	$	$
Farm values	569,841,000	1,413,120,000	875,110,000	195,593,000	–
Agricultural products	119,472,000	299,304,000	223,246,000	56,889,000	–
Totals, Agricultural Wealth	689,313,000	1,712,424,000	1,098,356,000	252,482,000	–
Mines	18,020,000	6,098,000	142,943,000	170,575,000	7,813,000
Forests	24,500,000	67,700,000	97,500,000	418,500,000	2,000,000
Fisheries	1,317,000	122,000	547,000	13,795,000	12,000
Central electric stations	25,734,000	7,445,000	13,256,000	41,910,000	807,000
Manufactures (machinery and tools, and estimate for capital in rural lands and buildings; duplication excluded)	31,460,000	6,842,000	26,803,000	173,306,000	
Manufactures (materials on hand and stocks in process)	24,847,000	13,258,000	18,318,000	49,257,000	[2]
Construction, custom and repair	9,652,000	8,772,000	7,640,000	12,390,000	–
Trading establishments	95,053,000	82,203,000	70,819,000	87,217,000	–
Steam railways	329,669,000	595,845,000	425,560,000	308,940,000	4,453,000
Electric railways	16,364,000	4,322,000	6,265,000	22,501,000	–
Canals	–	–	–	–	–
Telephones	20,347,000	31,351,000	25,284,000	22,383,000	65,000
Urban real property	479,322,000	246,594,000	256,795,000	751,557,000	–
Harbours	4,703,000	938,000		48,108,000	20,000
Shipping	1,636,000	168,000	146,000	35,485,000	506,000
Imported merchandise in store	28,475,000	17,188,000	19,564,000	48,981,000	253,000
Automobiles	49,774,000	82,322,000	63,310,000	60,183,000	120,000
Highways, etc.	13,600,000	25,000,000	29,000,000	32,000,000	–
Household furnishings, clothing, etc.	92,832,000	121,317,000	90,424,000	82,726,000	420,000
Specie, coin and other currency held by the Government, chartered banks and the general public	13,622,000	17,802,000	13,269,000	12,139,000	62,000
Totals	**1,970,240,000**	**3,047,242,000**	**2,406,268,000**	**2,644,435,000**	**16,531,000**
Percentages	6·39	9·88	7·80	8·57	0·06

[2] Included with British Columbia.

Subsection 2.—National Income and Income Tax Statistics.

The national income of Canada is necessarily less than its national production, a total for which is suggested in the general survey of production on pp. 203-214 of this volume. If, as there pointed out, there is no reason to suppose that those whose activities are not connected with the production of "form utilities" are less "productive" in the broad sense of the term than others, the total value of the production of 1930 must have been about $5,150,000,000.

In order to arrive at the figure of national income, however, certain heavy deductions from the above amount must be made—deductions especially connected with the maintenance of the industrial equipment of the country—providing not only for depreciation but for obsolescence and replacement by new and improved apparatus of production. Altogether, the charges under this head may have been about $400,000,000. This would leave the 1930 income of the Canadian people at somewhere in the neighbourhood of $4,750,000,000.

Incomes Assessed for Income Tax in Canada.[1]—In those countries of the world where an income tax has been established for a considerable time the figures of the assessed income have been generally accepted as furnishing a guide both to the amount and to the distribution of the total national income by classes. Estimates of the national income, based upon income tax statistics, have been published, for example, in Great Britain and in the United States.

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[1] This material has been revised by the Income Tax Branch of the Department of National Revenue.

The war income tax was introduced into Canada in 1917. Under the Income War Tax Act, the returns of the incomes of individuals and corporations are filed in the year following the earning of the incomes. Further, since the fiscal year ends on Mar. 31, the bulk of the receipts from the income tax usually comes in during the first two or three months of the next following fiscal year. Thus the income tax received in the fiscal year ended Mar. 31, 1932, represents, in the main, income tax collected on 1930 income and the income tax collected in the fiscal year ended 1931 represents in the main 1929 income. It is important that these facts should be kept in mind when considering income assessed in different years. Further, the particular provisions of the income tax existing at any particular time and the amendments extending or contracting the scope of the income tax by raising or lowering the limit of taxable income or increasing or lowering the allowances for children, etc., should also be borne in mind in the consideration of the following tables. Among these, Table **38** gives the grand total income of individuals and corporations assessed for the purpose of income war tax for the last twelve years, while Table **39** gives this income by provinces for the last five years and Table **40** shows the amount of income tax collected by provinces in the last five years. Tables **41** and **42** analyse the payments of income tax in the last four years by size of income class and by occupation of the taxpayer, respectively.

38.—Amounts of Income Assessed for the Purposes of the Income War Tax, by Individuals and Corporations, fiscal years ended Mar. 31, 1921-32.

Fiscal Year.	Individuals.		Corporations.		Total Amount.
	No.	Amount	No.	Amount.	
		$		$	$
1921	190,561	–	3,696	–	912,410,429
1922	290,584	1,058,577,617	8,286	403,951,553	1,462,529,170
1923	281,182	823,100,878	6,010	269,307,047	1,092,407,925
1924	239,036	802,617,497	5,569	305,410,374	1,108,027,871
1925	225,514	701,892,820	6,236	297,267,428	999,160,248
1926	209,539	697,016,973	5,738	306,093,673	1,003,110,646
1927	116,029	465,689,900	5,777	278,494,991	744,184,891[1]
1928	122,026	604,736,116	6,121	435,496,832	1,040,232,948
1929	129,663	668,687,536	7,438	526,714,731	1,195,402,267
1930	142,154	781,174,030	7,957	544,019,414	1,325,193,444
1931	143,601	815,714,684	7,603	555,763,956	1,371,478,640
1932	133,621	660,107,257	6,010	332,498,963	992,606,220

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[1] In 1927 the exemption limit was raised from $2,000 to $3,000 for married,and from $1,000 to $1,500 for single persons.

39.—Amounts of Income Assessed for the Purposes of the Income War Tax, by Provinces, fiscal years ended Mar. 31, 1928-32.

Province.	Amounts of Income Assessed.				
	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Prince Edward Island	1,906,145	2,201,506	2,293,916	2,238,000	1,981,321
Nova Scotia	19,187,670	20,418,952	20,183,735	22,954,032	22,748,690
New Brunswick	15,855,847	16,638,582	16,743,421	17,441,133	15,941,318
Quebec	247,108,323	342,206,962	402,108,906	374,899,266	234,313,011
Ontario	501,698,431	554,038,353	599,709,588	634,211,212	508,414,692
Manitoba	73,068,012	69,131,365	83,659,145	84,061,015	56,619,647
Saskatchewan	39,130,763	45,770,126	42,729,044	38,709,748	24,279,759
Alberta	37,164,202	37,692,873	47,251,766	79,999,021	45,115,980
British Columbia	103,587,321	106,218,237	109,367,418	115,849,332	82,033,481
Yukon	1,586,234	1,085,310	1,146,505	1,115,781	1,158,321
Totals	**1,040,232,948**	**1,195,402,266**	**1,325,193,444**	**1,371,478,640**	**992,606,220**

40.—Amounts of Income Tax Collected, by Provinces, fiscal years ended Mar. 31, 1928-32.

Province.	Amounts of Income Tax Collected.				
	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Prince Edward Island	37,933	38,654	45,178	45,671	40,930
Nova Scotia	549,413	593,349	647,213	666,009	833,836
New Brunswick	655,234	553,686	611,978	612,947	530,852
Quebec	19,061,843	19,822,209	23,308,394	23,087,571	20,671,026
Ontario	25,614,930	28,690,232	33,128,633	34,713,871	30,268,306
Manitoba	3,141,123	3,272,606	3,707,769	3,537,771	2,232,348
Saskatchewan	775,075	894,494	1,037,406	932,954	403,481
Alberta	1,273,786	1,405,606	2,000,979	2,316,043	1,853,848
British Columbia	5,440,359	4,123,203	4,495,649	5,106,454	4,403,853
Yukon	21,351	28,233	19,857	19,034	10,360
Head Office	–	–	17,670	9,697	5,560
Totals	**56,571,047**	**59,422,272**	**69,020,726**	**71,048,022**	**61,254,400**

41.—Numbers of Individual and Corporate Tax Payers, by Size of Income and Amount of Taxes Paid under the Income War Tax Act, fiscal years ended Mar. 31, 1929-32.

1.—INDIVIDUALS.

Income Class.	1929.		1930.		1931.		1932.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
		$		$		$		$
Under $2,000	36,857	341,777	38,709	284,797	38,788	171,237	37,002	162,613
$ 2,000 to $ 3,000	22,374	719,631	20,090	290,052	20,885	316,458	19,595	291,274
$ 3,000 to $ 4,000	19,408	280,990	24,429	399,316	22,869	327,728	21,160	294,739
$ 4,000 to $ 5,000	15,049	386,046	17,468	402,594	17,909	437,407	16,555	375,629
$ 5,000 to $ 6,000	9,529	394,702	10,980	441,412	11,348	448,935	10,410	410,920
$ 6,000 to $ 7,000	6,833	770,420	7,349	596,835	7,483	478,985	6,839	434,007
$ 7,000 to $ 8,000	3,950	412,301	4,620	453,082	4,814	472,641	4,573	475,306
$ 8,000 to $ 9,000	2,785	416,031	3,313	470,636	3,449	484,866	3,238	466,442
$ 9,000 to $10,000	2,185	472,862	2,607	534,755	2,609	518,664	2,462	470,925
$10,000 to $15,000	5,520	2,396,215	6,575	2,650,707	6,825	2,528,683	5,901	2,203,781
$15,000 to $20,000	2,197	1,964,324	2,540	2,226,401	2,878	2,386,232	2,405	1,955,947
$20,000 to $25,000	1,027	1,806,366	1,181	1,937,343	1,314	2,071,218	1,123	1,727,028
$25,000 to $30,000	579	1,489,237	674	1,737,813	784	1,860,843	646	1,492,213
$30,000 to $50,000	847	3,925,527	1,016	4,486,976	1,045	4,277,731	–	–
$30,000 to $35,000	–	–	–	–	–	–	491	1,507,718
$35,000 to $40,000	–	–	–	–	–	–	267	968,530
$40,000 to $45,000	–	–	–	–	–	–	197	882,019
$45,000 to $50,000	–	–	–	–	–	–	143	746,336
$50,000 and over	523	9,328,921	603	10,571,399	601	10,131,844	614	10,269,892
Totals	**129,663**	**25,105,359**	**142,154**	**27,484,118**	**143,601**	**26,913,472**	**133,621**	**25,135,319**
Unclassified amounts	–	285,270	–	275,882	–	291,615	–	148,595
	–	25,390,620	–	27,760,000	143,601	27,205,087	133,621	25,283,914
Refunds	–	597,222	–	522,497	–	580,906	–	511,068
Net Totals	**129,663**	**24,793,398**	**142,154**	**27,237,503**	**143,601**	**26,624,181**	**133,621**	**24,772,846**

2.—CORPORATIONS.

$ 2,000 to $ 3,000	1,491	122,492	1,528	76,349	1,400	66,338	1,123	54,297
$ 3,000 to $ 4,000	695	100,149	781	119,366	723	98,914	555	91,214
$ 4,000 to $ 5,000	495	115 460	551	132,597	468	111,442	431	122,421
$ 5,000 to $ 6,000	370	115,179	440	142,324	426	146,851	343	145,178
$ 6,000 to $ 7,000	392	217,825	345	140,715	334	142,237	294	147,203
$ 7,000 to $ 8,000	244	129,723	274	142,926	249	123,619	222	135,742
$ 8,000 to $ 9,000	223	125,741	232	150,951	203	137,066	197	143,269
$ 9,000 to $10,000	193	122,736	222	160,785	168	125,480	140	112,685
$10,000 to $15,000	692	659,128	702	621,296	654	587,729	495	550,720
$15,000 to $20,000	390	515,068	441	590,491	438	567,087	354	531,830
$20,000 to $25,000	313	605,628	289	494,263	326	597,828	229	496,928
$25,000 to $30,000	222	478,418	238	533,373	254	550,948	176	437,202
$30,000 to $50,000	530	1,672,228	511	1,551,375	563	1,802,322	–	–
$30,000 to $35,000	–	–	–	–	–	–	175	555,401
$35,000 to $40,000	–	–	–	–	–	–	119	457,740

41.—Numbers of Individual and Corporate Tax Payers, by Size of Income and Amount of Taxes Paid under the Income War Tax Act, fiscal years ended Mar. 31, 1929-32—concluded.

2.—CORPORATIONS—concluded.

Income Class.	1929.		1930.		1931.		1932.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
		$		$		$		$
$40,000 to $45,000..	–	–	–	–	–	–	100	446,056
$45,000 to $50,000..	–	–	–	–	–	–	80	405,241
$50,000 and over...	1,181	30,410,897	1,398	37,244,203	1,393	39,370,016	971	31,868,113
Totals.........	**7,438**[1]	**35,408,679**[1]	**7,957**[2]	**42,117,562**[2]	**7,603**[3]	**44,440,244**[3]	**6,010**[4]	**36,704,293**[4]
Unclassified Amounts........	–	263,665	–	332,519	–	471,429	–	266,755
	7,438[1]	35,672,344[1]	7,957[2]	42,450,081[2]	7,603[3]	44,911,673[3]	6,010[4]	36,971,048[4]
Refunds...........	–	1,043,469	–	666,857	–	487,832	–	489,494
Net Totals....	**7,438**[1]	**34,628,875**[1]	**7,957**[2]	**41,783,224**[2]	**7.603**[3]	**44,423,841**[3]	**6,010**[4]	**36,481,554**[4]

[1] Totals include 7 corporations paying $18,007 in taxation, grouped to conceal net income and identity of tax payers. [2] Totals include 5 corporations paying $16,548 in taxation, grouped to conceal net income and identity of tax payers. [3] Totals include 4 corporations paying $12,367 in taxation, grouped to conceal net income and identity of tax payers. [4] Totals include 6 corporations paying $3,053 in taxation, grouped to conceal net income and identity of tax payers.

42.—Income Tax Paid, by Occupations of the Tax Payers, fiscal years ended Mar. 31, 1929-32.

1.—INDIVIDUALS.

Income Class.	1929.		1930.		1931.		1932.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
		$		$		$		$
Agrarians..........	3,111	154,733	2,626	123,909	2,276	131,910	653	36,379
Professionals.......	6,771	1,621,398	7,439	1,716,675	7,448	1,913,761	6,512	1,893,161
Employees........	87,469	7,838,590	95,328	8,336,416	99,658	8,717,015	96,272	8,355,336
Merchants, retail..	9,229	1,217,292	11,117	1,248,277	10,174	1,196,920	7,314	830,524
Merchants, wholesale............	1,411	481,835	1,500	464,726	1,563	454,540	987	271,459
Manufacturers.....	1,001	245,454	1,140	263,525	947	225,135	823	162,354
Natural resources..	171	47,949	243	79,677	174	57,942	147	21,331
Financial..........	8,645	6,085,230	9,534	7,084,327	9,278	6,641,080	9,718	5,874,722
Personal corporations............	644	3,523,192	912	3,614,204	597	3,114,145	568	3,082,674
Family corporations............	2,247	1,269,858	3,129	1,881,138	3,235	1,953,544	2,626	1,993,797
All others.........	8,964	2,619,819	9,186	2,671,243	8,251	2,507,479	8,001	2,613,581
Unclassified.......	–	285,270	–	275,882	–	291,616	–	148,596
Totals.........	**129,663**	**25,390,620**	**142,154**	**27,759,999**	**143,601**	**27,205,087**	**133,621**	**25,283,914**
Refunds...........	–	597,222	–	522,497	–	580,906	–	511,068
Net Totals....	**129,663**	**24,793,398**	**142,154**	**27,237,502**	**143,601**	**26,624,181**	**133,621**	**24,772,846**

2.—CORPORATIONS.

Income Class.	1929.		1930.		1931.		1932.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
Agrarians..........	83	50,418	111	58,028	88	56,404	39	19,088
Merchants, retail..	1,478	2,546,367	1,551	2,836,933	1,349	2,798,156	1,044	2,241,079
Merchants, wholesale............	1,019	2,637,469	1,071	2,981,802	958	2,975,641	640	1,499,306
Manufacturers.....	2,427	17,121,952	2,502	19,885,735	2,475	21,988,645	1,803	17,692,605
Natural resources..	244	2,656,326	309	3,617,300	295	4,211,330	143	2,872,504
Financial..........	886	3,052,120	1,021	3,960,486	1,134	4,261,232	1,050	4,830,390
Transportation and public utilities...	386	5,380,264	358	6,686,498	345	6,192,278	312	4,769,437
All others.........	915	1,963,764	1,034	2,090,779	959	1,956,557	979	2,779,884
Unclassified.......	–	263,664	–	332,520	–	471,430	–	266,755
Totals.........	**7,438**	**35,672,344**	**7,957**	**42,450,081**	**7,603**	**44,911,673**	**6,010**	**36,971,048**
Refunds...........	–	1,043,469	–	666,857	–	487,832	–	489,494
Net Totals....	**7,438**	**34,628,875**	**7,957**	**41,783,224**	**7,603**	**44,423,841**	**6,010**	**36,481,554**
Grand Totals, Individuals and Corporations...	–	**59,422,273**	–	**69,020,726**	–	**71,048,022**	–	**61,254,400**

Subsection 3.—Outside Capital Invested in Canada and Canadian Capital Invested Elsewhere.[1]

An estimate of the outside capital invested in Canada and the Canadian capital invested outside of the Dominion is now prepared annually by the Internal Trade Branch of the Dominion Bureau of Statistics. Any estimate of this character is liable to a margin of error, but the utmost care has been taken in the computation and it is believed that the figures approximate fairly to actual conditions. More complete information is being obtained from year to year, enabling corrections to be made in previous estimates such as were published at p. 836 of the 1929 Year Book. Details of the investment of outside capital in Canada according to the latest revision (February, 1932) are given for the last five available years in Table **43.**

It is estimated that the total investment of British and foreign capital in Canada on Jan. 1, 1931, was $6,477,879,000. Of this sum, $2,204,857,000 was British capital, $4,107,803,000 was from the United States and $165,217,000 from other countries. Though these totals are large, it should be remembered that the national wealth of the Dominion in 1929 is estimated at $30,840,210,000 exclusive of the value of those undeveloped natural resources in which some of the outside capital is invested, and that it is inevitable that at the present stage Canada should seek the assistance of outside capital to develop the unexploited natural resources of the Dominion.

It must also be borne in mind that Canadians have invested large amounts of capital abroad. The Bureau estimates that Canadian investments in other countries amounted to $1,831,310,000 at the beginning of 1931, or nearly 30 p.c. of the amount of outside investments in Canada. Of this $1,047,285,000 was placed in the United States, $84,826,000 in Great Britain and $699,198,000 in other countries. (Table **44.**)

It is estimated that the amount of business capital employed in Canada is $17,500,000,000. This sum includes the bonded indebtedness of Dominion, Provincial and municipal governments, investments in railways, all manufacturing concerns, mines and metal industries, public utilities, trading establishments, finance, insurance, land and mortgages. It does not include private capital in domestic enterprises such as farms, homes, etc. Of this sum it is estimated that 65 p.c. or $11,500,000,000 is owned in Canada; 21 p.c. or $3,725,000,000 in United States; 13 p.c. or $2,228,000,000 in Great Britain; 1 p.c. or $171,000,000 in other countries.

If the basis of comparison is total national wealth, British and foreign investments decrease in significance. Canada's national wealth in 1930 was probably $30,000,000,000; net British and foreign investments in Canada were about $4,647,000,000 or 15½ p.c. of the total.

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[1] Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. For a list of the publications of this Branch see Chapter XXIX, under "Internal Trade".

43.—Estimated British and Foreign Investments in Canada, Jan. 1, 1927-31.

(000's omitted.)

Type of Investment.	Jan. 1, 1927.	Jan. 1, 1928.	Jan. 1, 1929.	Jan. 1, 1930.	Jan. 1, 1931.
Total British and Foreign Investments—					
Government Securities (Dominion, Provincial and Municipal)	1,190,772	1,199,492	1,179,027	1,184,670	1,302,941
Public Utilities—					
Railways	1,439,642	1,504,825	1,537,924	1,674,865	1,738,064
Other Public Utilities (Traction, Light, Heat, Power, Telephone, etc.)	559,839	593,944	573,464	628,230	703,658
Industries—					
Pulp, Paper and Lumber	395,956	475,343	510,531	520,248	560,248
Mining	214,606	226,120	273,912	281,600	295,100
Metal Industries	542,580	543,203	561,966	546,915	558,366
All other industries	452,833	469,348	490,469	492,376	474,778
Trading Establishments	209,510	222,563	234,753	250,000	250,000
Finance and Insurance	161,121	189,480	192,304	209,022	255,091
Land and Mortgage	325,000	334,346	338,029	338,033	339,633
Totals	**5,491,859**	**5,758,664**	**5,892,379**	**6,125,959**	**6,477,879**
Investments by Great Britain—					
Government Securities (Dominion, Provincial and Municipal)	495,577	478,825	475,595	477,296	466,291
Public Utilities—					
Railways	862,315	867,080	870,523	898,523	898,523
Other Public Utilities (Traction, Light, Heat, Power, Telephone, etc.)	151,514	152,852	106,665	116,880	130,880
Industries—					
Pulp, Paper and Lumber	68,496	75,902	76,072	75,299	75,299
Mining	31,724	34,728	49,477	52,800	52,800
Metal Industries	42,366	42,496	42,976	45,576	45,576
All other Industries	167,084	171,691	177,706	179,046	172,819
Trading Establishments	51,287	60,543	61,309	75,000	75,000
Finance and Insurance	97,800	112,930	108,459	118,446	96,911
Land and Mortgage	187,000	189,998	189,156	189,158	190,758
Totals	**2,155,163**	**2,187,045**	**2,157,938**	**2,228,024**	**2,204,857**
Investments by United States—					
Government Securities (Dominion, Provincial and Municipal)	683,995	709,257	692,022	695,873	825,149
Public Utilities—					
Railways	549,866	608,817	638,383	743,074	806,274
Other Public Utilities (Traction, Light, Heat, Power, Telephone, etc.)	394,934	428,148	453,482	496,740	556,594
Industries—					
Pulp, Paper and Lumber	319,979	392,763	427,646	438,104	478,104
Mining	177,747	184,753	216,637	220,000	233,500
Metal Industries	489,930	490,363	508,659	489,945	501,396
All other Industries	276,223	284,141	298,124	298,410	287,715
Trading Establishments	153,687	157,524	168,535	170,000	170,000
Finance and Insurance	50,431	61,771	70,383	76,641	151,113
Land and Mortgage	88,000	93,352	97,956	97,958	97,958
Totals	**3,184,792**	**3,410,889**	**3,571,827**	**3,726,745**	**4,107,803**
Investments by Other Countries—					
Government Securities (Dominion, Provincial and Municipal)	11,201	11,409	11,409	11,500	11,500
Public Utilities—					
Railways	27,459	28,924	29,017	33,267	33,267
Other Public Utilities (Traction, Light, Heat, Power, Telephone, etc.)	13,391	12,944	13,317	14,610	16,184
Industries—					
Pulp, Paper and Lumber	7,482	6,679	6,874	6,845	6,845
Mining	5,136	6,640	7,799	8,800	8,800
Metal Industries	10,283	10,343	10,330	11,394	11,394
All other Industries	9,526	13,516	14,639	14,920	14,243
Trading Establishments	4,536	4,496	4,909	5,000	5,000
Finance and Insurance	12,890	14,779	13,462	13,935	7,067
Land and Mortgage	50,000	51,000	50,917	50,917	50,917
Totals	**151,904**	**160,730**	**162,613**	**171,188**	**165,217**

44.—Estimated Total Investments of Canadian Capital in British and Foreign Countries, as at Jan. 1, 1928-31.

(000's omitted.)

Item.	Jan. 1, 1928.				Jan. 1, 1929.			
	Great Britain.	United States.	Other Countries.	Total.	Great Britain.	United States.	Other Countries.	Total.
	$	$	$	$	$	$	$	$
Canadian Government credits and balances abroad.	7,779	7,032	32,433	47,244	2,869	23,842	31,099	57,810
Balances of chartered banks abroad..........	47,689	143,069	47,689	238,447	37,519	112,558	37,520	187,597
Foreign securities held by banks...	46,881	33,356	15,455	95,682	24,662	13,775	28,926	67,363
Investments of insurance companies abroad.......	18,016	175,871	92.082	285,969	18,483	180,436	94,472	293,391
Direct industrial investments.....	1,700	168,213	127,905	297,818	1,000	144,490	183,642	329,132
Miscellaneous......	9,850	347,085	256,979	613,914	9,850	512,085	281,979	803,914
Totals......	**131,915**	**874,626**	**572,543**	**1,579,074**	**94,383**	**987,165**	**657,638**	**1,739,207**

Item.	Jan. 1, 1930.				Jan. 1, 1931.			
	Great Britain.	United States.	Other Countries.	Total.	Great Britain.	United States.	Other Countries.	Total.
	$	$	$	$	$	$	$	$
Canadian Government credits and balances abroad.	419	15,478	30,834	46,731	670	27,576	30,725	58,971
Balances of chartered banks abroad..........	19,599	58,799	19,599	97,997	13,840	41,520	13,840	69,200
Foreign securities held by banks...	25,927	15,466	26,711	68,104	29,566	36,254	28,411	94,231
Investments of insurance companies abroad.......	22,079	215,537	112,851	350,467	27,900	272,360	142,601	442,862
Direct industrial investments.....	1,000	154,490	198,642	354,132	1,000	152,490	198,642	352,132
Miscellaneous......	11,850	562,085	289,979	863,914	11,850	517,085	284,979	813,914
Totals.........	**80,874**	**1,021,855**	**678,616**	**1,781,345**	**84,826**	**1,047,285**	**699,198**	**1,831,310**

CHAPTER XXII—CURRENCY AND BANKING; LOAN AND TRUST COMPANIES.

Section 1.—Canada's Monetary System.

Historical.—Early trade in Canada was carried on by barter, which at times resulted (*e.g.*, in transactions between Indians and fur traders) in the adoption of beads, blankets, etc., as recognized media of exchange. Later, during the French period in Canada, while barter still formed perhaps the most important means of exchange between individuals and merchants, a more or less satisfactory currency system developed. Beaver and other furs, tobacco and wheat were at times used as substitutes for currency, the last named being at one time a legal tender. A makeshift currency system was also developed during the French *régime* when playing cards, stamped with a value and redeemable yearly on the receipt of bills of exchange on Paris, came into circulation. Other paper money was also issued, and the total amount outstanding at the time of the cession was estimated at 80,000,000 livres, which was nearly all lost to its holders.

The British Government next sought to establish a uniform standard of colonial currency, but since at this time French coinage again began to come into circulation and the Spanish dollar also rivalled the English shilling as the most common medium of exchange, this was not universally possible. English sovereigns were overrated in terms of dollars in an endeavour to encourage their circulation. A rate of 5s. to the dollar was set in Halifax and was in use in government accounting systems, while in Montreal, York currency (the rates prevalent in New York), giving the dollar an exchange value of 7s. 6d. or 8s., was in common use.

Canadians again became more or less familiar with the characteristics of paper money as a result of the experiences of the various neighbouring Northern States during the first half of the nineteenth century. During the war of 1812 this familiarity was increased by the establishment of an army bill office, issuing bills of various denominations, redeemable on presentation. The growing volume of trade between Canada and the United States also resulted in a tendency toward a decimal coinage, and in 1853 a measure was passed providing for the adoption of a decimal currency, with a dollar equivalent to the United States dollar; the British sovereign was made legal tender at $4·86⅔. An Act of 1857 requiring all government accounts to be kept in dollars and cents came into force on Jan. 1, 1858; the formal adoption of decimal currency in the Province of Canada dates from that time.

By the Uniform Currency Act of 1871 (34 Vict., c. 4), the decimal currency was extended throughout the Dominion, the British sovereign was made legal tender for $4.86⅔ and the United States eagle, legal tender for $10, while authority was given to coin a Canadian $5 gold piece. No Canadian gold coinage was issued, however, prior to the establishment of the Canadian branch of the Royal Mint in 1908, the first coins then struck being sovereigns similar to those of Great Britain, but with a small "C" identifying them as having been coined in Canada. In May, 1912, the first Canadian $10 and $5 gold pieces were struck, but the Canadian gold coinage has so far been limited in amount, since Canadians have generally preferred Dominion notes to gold for use within the country and, when gold is needed for export, bullion or British and United States gold coin serve the purpose equally well.

The Royal Canadian Mint.—The Ottawa Mint, established as a branch of the Royal Mint under the (Imperial) Coinage Act, 1870, and opened on Jan. 2, 1908, was by 21-22 Geo. V, c. 48, constituted a branch of the Department of Finance, and by the Proclamation of Nov. 14, 1931, issued under Section 3 of that Act, it has since Dec. 1, 1931, operated as the Royal Canadian Mint. At first the British North American provinces, and later the Dominion of Canada, obtained their coins from the Royal Mint in London or from The Mint, Birmingham, Ltd., and in its earlier years the operations of the Mint in Canada were confined to the production of gold, silver and bronze coins for domestic circulation, of British sovereigns, and of small coinages struck under contract for Newfoundland and Jamaica. Previous to 1914 small quantities of gold bullion were refined, but during the War the Mint came to the assistance of the British Government by establishing a refinery in which nearly twenty million ounces of South African gold were treated on account of the Bank of England, and the subsequent great development of the gold-mining industry in Canada has resulted in gold-refining becoming one of the principal activities of the Mint. Gold coins have never been a popular medium of exchange in Canada and have not been struck since 1919, most of the fine gold produced from the rough shipments from the mines being delivered to the Department of Finance in the form of bars worth approximately $8,300 each, the rest being sold in a convenient form to manufacturers. The fine silver extracted from the rough gold, when not required for coinage, is sold on the New York market or disposed of to local manufacturing firms.

The domestic currency of Canada, as at present authorized by the Currency Act, consists of: $20, $10, $5 and $2½ gold pieces, 900 millesimal fineness (only $10 and $5 pieces have been issued); of $1, 50-cent, 25-cent and 10-cent silver pieces, 800 millesimal fineness; of 5-cent pieces of pure nickel (from metal produced in Canada); and of 1-cent pieces in bronze. The silver 5-cent piece is still legal tender but its coinage was discontinued in 1921; the silver dollar has never been coined.

Gold.—Gold is used only to an insignificant extent as a circulating medium in Canada, its monetary use being practically confined to reserves, but $5 and $10 gold pieces weighing respectively 129 and 258 grains, 9-10ths pure gold by weight, have been coined, the Canadian gold dollar thus containing 23·22 grains of pure gold. These coins were first issued in 1912, authority to issue them having been conferred in 1910. By the Currency Act, 1910 (9-10 Edw. VII, c. 14), British sovereigns, which are legal tender for $4.86⅔, and other gold coins, and the $5, $10 and $20 gold coins of the United States, which contain exactly the same weight of gold as Canadian gold coins of these denominations, are also legal tender. These, however, are almost entirely divided between the Dominion Government and the banks as reserves, and the chief circulating medium of the country is provided by paper and token currency.

Table **1**, compiled by the Master of the Royal Canadian Mint, shows the value of the gold bullion received for treatment at the Ottawa Mint since its foundation, together with the gold coin and bullion issued. A statement of the gold, silver, nickel and bronze coinages issued to the separate provinces and to the Dominion of Canada since 1858 is published as Table **2**. Table **3**, compiled by the Dominion Comptroller of Currency, gives the form in which the gold has been held by the Government in recent years.

1.—Value of Gold Bullion Received for Treatment and Value of Gold Coin and Bullion Issued from the Ottawa Mint, 1908-32.

Calendar Year.	Gold Received.	Gold Coin Issued.		Bullion Issued.	Total Issued.
		Sovereigns.	Canadian.		
	$	$	$	$	$
1908 to 1916	10,463,623·94	1,585,058·69	4,868,420	2,916,552·87	9,370,031·56
1917	834,507·05	910·07	–	1,836,741·72	1,837,651·79
1918	4,942,051·11	636,404·24	–	3,461,337·80	4,097,742·04
1919	10,757,173·72	832,404·40	–	10,162,325·22	10,994,729·62
1920	11,530,413·82	19·47	–	11,729,633·29	11,729,652·76
1921	16,915,038·45	661·86	–	16,598,784·71	16,599,446·57
1922	22,474,548·41	–	–	22,452,310·79	22,452,310·79
1923	12,687,098·94	–	–	13,219,784·95	13,219,784·95
1924	2,298,565·73	–	–	2,224,224·68	2,224,224·68
1925	2,492,403·07	–	–	2,529,713·69	2,529,713·69
1926	28,434,159·27	–	–	27,858,765·72	27,858,765·72
1927	29,936,535·82	–	–	30,013,576·98	30,013,576·98
1928	27,392,510·27	–	–	26,980,873·75	26,980,873·75
1929	9,061,523·51	–	–	9,682,363·42	9,682,363·42
1930	17,820,668·21	–	–	14,934,758·75	14,934,758·75
1931	35,581,117·00	–	–	35,867,937·27	35,867,937·27
1932	58,491,549·39	–	–	59,394,754·05	59,394,754·05
Totals	**655,011,734·49**[1]	**3,055,458·73**	**4,868,420**	**645,040,023·42**	**652,963,902·35**[2]

[1] Includes $352,898,246·78 of Bank of England gold received between 1915 and 1919.
[2] Includes $353,175,583·76 of Bank of England bullion issued between 1915 and 1919.

2.—Statement of Coinage (in Dollars' and Cents' Denominations) Issued to the Dominion of Canada, 1858-1932.

Calendar Year.	Gold.	Silver.	Nickel.	Bronze.	Total.
	$	$	$	$	$
Struck at Mints in England[1]—					
1858 to 1907 New Brunswick, 1861-2-4	–	95,000	–	20,000	115,000
Nova Scotia, 1861-2-4	–	–	–	30,000	30,000
Prince Edward Island, 1871	–	–	–	10,000	10,000
Canada, 1858-1907	–	12,459,996	–	804,429	13,264,425
Totals	–	12,554,996	–	864,429	13,419,425
Struck at The Royal Mint, Ottawa—					
1908 to 1916	4,868,420	8,595,327	–	459,204	13,922,951
1917	–	1,862,200	–	116,900	1,979,100
1918	–	2,402,000	–	131,817	2,533,817
1919	–	3,258,044	–	115,100	3,373,144
1920	–	1,356,000	–	209,085	1,565,085
1921	–	128,000	–	60,700	188,700
1922	–	24,000	69,000	12,400	105,400
1923	–	28,000	127,000	19,300	174,300
1924	–	–	74,500	11,900	86,400
1925	–	14,000	126,000	22,100	162,100
1926	–	50,000	168,500	28,200	246,700
1927	–	574,000	249,000	37,500	860,500
1928	–	867,000	250,000	92,100	1,209,100
1929	–	1,081,000	267,000	123,300	1,471,300
1930	–	326,000	164,500	13,400	503,900
1931	–	475,400	281,000	51,400	807,800
Struck at The Royal Canadian Mint, Ottawa—					
1932	–	287,000	165,000	213,200	665,200
Totals	**4,868,420**	**33,882,967**	**1,941,500**	**2,576,921**	**43,274,922**

[1] Struck at The Royal Mint in London, or at The Mint, Birmingham, Ltd.

3.—Composition of Canadian Gold Reserves on Dec. 31, 1905-32.

Dec. 31,—	British Coin.	U.S. Coin.	Canadian Coin.	Bullion.	Total.
	$	$	$	$	$
1905	3,990,717	29,494,298	–	–	33,485,015
1906	7,375,857	31,040,149	–	–	38,416,006
1907	5,366,478	33,529,889	–	–	38,896,367
1908	6,261,715	54,909,076	–	–	61,170,791
1909	6,537,227	62,988,474	–	–	69,525,701
1910	6,304,524	68,261,279	–	222,934	74,788,737
1911	6,900,095	93,507,764	–	222,934	100,630,793
1912	4,554,691	98,648,736	650,185	222,934	104,076,546
1913	6,391,375	106,642,969	2,118,210	222,934	115,375,488
1914	4,482,524	86,382,620	3,440,150	320,345	94,625,639
1915	29,606,990	86,516,595	3,436,095	775,201	120,334,881
1916	29,333,111	86,034,920	3,426,760	803,002	119,597,693
1917	27,476,790	77,899,494	3,413,465	11,352,856	120,142,605
1918	27,362,255	75,785,665	3,411,465	14,701,439	121,260,824
1919	27,661,192	60,988,110	3,408,310	27,154,222	119,211,834
1920	26,728,016	35,896,485	3,387,125	35,090,344	101,101,970
1921	26,729,501	35,896,305	3,385,690	18,558,557	84,570,053
1922	26,730,576	67,941,550	3,340,650	34,572,504	132,585,280
1923	27,212,790	41,090,395	3,336,490	46,026,852	117,666,527
1924	26,342,019	77,173,105	3,327,125	34,905,387	141,747,636
1925	29,894,943	67,135,310	3,315,730	37,512,195	137,858,178
1926	32,133,941	72,423,610	3,221,930	23,415,643	131,195,124
1927	28,948,085	51,179,390	3,089,010	47,516,079	130,732,564
1928	34,163,297	31,018,970	2,931,835	25,202,771	93,316,873
1929	32,164,284	10,995,220	2,801,520	17,034,256	62,995,280
1930	30,634,058	28,748,085	2,733,150	34,096,809	96,212,102
1931	17,736,296	4,270,780	2,732,880	42,220,192	66,960,148
1932	17,638,240	4,271,355	2,704,930	48,429,889	73,044,414

Token Currency.—Canadian silver dollars weighing 360 grains, 37-40ths fine, are provided for by the Currency Act of 1910, but no silver dollars have ever been struck by the Mint. Fifty-, 25-, 10-, and 5-cent pieces of weight proportionate to their respective fractions of the dollar, and of the same fineness, are in circulation, but, by c. 9 of the Statutes of 1920, the standard of fineness was reduced to 8-10ths. In 1921 the coinage of a nickel 5-cent piece weighing 70 grains was authorized. Silver coins are legal tender only up to ten dollars, nickel coins to five dollars, and bronze coins to twenty-five cents. Table **4** shows the *net* issue of silver and bronze coins (that is, the value issued less the value withdrawn), by years from 1901.

4.—Circulation in Canada of Silver and Bronze Coin, Dec. 31, 1901-32.

NOTE.—Figures supplied by the Royal Canadian Mint.

Dec. 31,—	Net Amounts of Silver Coin Issued.[1]		Amounts per head.		Net Amounts of Bronze Coin Issued.[1]		Amounts per head.	
	A. During the Year.	B. Since 1858.	Col. A.	Col. B.	C. During the Year.	D. Since 1858.	Col. C.	Col. D.
	$	$	cts.	$	$	$	cts.	cts.
1901	420,000	8,279,924	7·8	1·54	41,000	676,429	0·8	12·6
1902	774,000	9,053,924	14·1	1·65	30,000	706,429	0·5	12·8
1903	633,850	9,687,774	11·2	1·71	40,000	746,429	0·7	13·2
1904	350,000	10,037,774	6·0	1·72	25,000	771,429	0·4	13·2
1905	450,000	10,487,774	7·5	1·75	20,000	791,429	0·3	13·2
1906	807,461	11,295,235	13·0	1·82	41,000	832,429	0·7	13·4
1907	1,194,000	12,489,235	18·6	1·95	32,000	864,429	0·5	13·5
1908	38,541	12,527,776	0·6	1·89	21,604	886,033	0·3	13·4
1909	648,700	13,176,476	9·5	1·94	39,300	925,333	0·6	13·6
1910	1,151,186	14,327,662	16·5	2·05	42,020	967,353	0·6	13·8
1911	1,343,001	15,670,663	18·6	2·18	54,275	1,021,628	0·8	14·2
1912	1,303,237	16,973,900	17·7	2·30	49,977	1,071,605	0·7	14·5
1913	927,131	17,901,031	12·2	2·35	55,572	1,127,177	0·7	14·8
1914	626,198	18,527,229	7·9	2·35	35,057	1,162,234	0·4	14·8
1915	61,344	18,588,573	0·8	2·33	50,354	1,212,588	0·6	15·2

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[1] These figures of *net* amounts of coin issued show the values issued less the values withdrawn and to this extent do not correspond with the figures shown in Table 2.

4.—Circulation in Canada of Silver and Bronze Coin, Dec. 31, 1901-32—concluded.

Dec. 31,—	Net Amounts of Silver Coin Issued.[1]		Amounts per head.		Net Amounts of Bronze Coin Issued.[1]		Amounts per head.	
	A. During the Year.	B. Since 1858.	Col. A.	Col. B.	C. During the year.	D. Since 1858.	Col. C.	Col. D.
	$	$	cts.	$	$	$	cts.	cts.
1916	1,179,516	19,768,089	14·7	2·47	110,646	1,323,234	1·4	16·5
1917	1,790,941	21,559,030	22·2	2·68	116,800	1,440,034	1·4	17·9
1918	2,329,091	23,888,121	28·6	2·93	131,777	1,571,811	1·6	19·3
1919	3,196,027	27,084,148	38·5	3·26	115,011	1,686,822	1·4	20·3
1920	1,300,702	28,384,850	15·2	3·32	208,961	1,895,783	2·4	22·2
1921	40,191	28,344,659	0·5	3·22	60,543	1,956,326	0·7	22·2
1922	–	28,151,444[2]	–	3·16	11,742	1,968,068	0·1	22·1
1923	–	28,052,347[2]	–	3·11	19,118	1,987,186	0·2	22·1
1924	–	27,863,502[2]	–	3·05	11,430	1,998,616	0·1	21·9
1925	–	27,713,019[2]	–	2·98	21,854	2,020,470	0·2	21·7
1926	–	27,433,463[2]	–	2·90	23,363	2,043,833	0·2	21·6
1927	–	27,104,534[2]	–	2·81	36,363	2,080,196	0·4	21·6
1928	633,429	27,737,963	6·4	2·82	91,461	2,171,657	0·9	22·1
1929	900,232	28,638,195	9·0	2·86	119,132	2,290,789	1·2	22·8
1930	–	28,562,330[2]	–	2·80	6,616	2,297,405	0·1	22·5
1931	144,018	28,706,348	1·4	2·77	48,649	2,346,054	0·5	22·6
1932	147,392	28,853,740	1·4	2·75	212,908	2,558,962	2·0	24·4

[1] The figures for *net* amounts of coin issued show the values issued less the values withdrawn and to this extent do not correspond with the figures shown in Table 2.

[2] The decreases shown in recent years are due to the withdrawal of worn and mutilated silver coins from circulation.

Dominion Notes.—At the present time Dominion notes may be issued under any one of three statutory authorities: (1) the Dominion Notes Act (R.S.C. 1927, c. 41), which requires a gold reserve of 25 p.c. to be held against the first $50,000,000 of notes issued and full gold coverage against any issue in excess of $50,000,000; (2) the Finance Act (R.S.C. 1927, c. 70), Part II of which authorizes the Minister of Finance to advance to any chartered bank or to the savings banks of Quebec, Dominion notes to any amount on the pledge of approved securities deposited with the Minister. These advances bear interest and no gold coverage is required to be held on Dominion notes so advanced; (3) Chap. 4 of the Statutes of 1915, authorizing the Government to issue Dominion notes to the amount of $26,000,000 without gold coverage, but partly covered by the deposit of $16,000,000 of railway securities guaranteed by the Dominion Government.[1]

Dominion notes are of two types, those in general circulation and those used only in inter-bank transactions, the latter being described as "special" notes. Notes in general circulation are of the denominations 25 cents, $1, $2, $4, $5, $50,

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[1] The following is an outline of Canadian legislation respecting the issue of notes. After Confederation, by an Act of 1868 (31 Vict., c. 46), authority was given for the issue of notes to the extent of eight million dollars. The reserve was fixed at 20 p.c. up to a circulation of five millions; beyond that, 25 p.c. to be held as reserve. The law of 1870 (33 Vict., c. 10) authorized a limit of nine million dollars. The reserve was fixed at 20 p.c., but the nine millions were only to be issued when the specie amounted to two millions. Dollar for dollar was to be held beyond nine millions. In 1872 (35 Vict., c. 7) the reserve for the excess over nine millions was fixed at 35 p.c. in specie. This was amended in 1875 (38 Vict., c. 5) by requiring dollar for dollar beyond twelve millions; for the reserve between nine and twelve millions 50 p.c. in specie was to be held. In 1876 the law respecting Dominion notes was extended to the provinces of Prince Edward Island, British Columbia and Manitoba. In 1880 (43 Vict., c. 13) the basis of the present standard was established. A reserve of 25 p.c. in gold and guaranteed debentures was required, of which 15 p.c. at least was to be in gold. The limit was raised to twenty million dollars. In 1894 (57-58 Vict., c. 21) the limit was raised to twenty-five millions, but this was found unworkable and was repealed in 1895 (58-59 Vict., c. 16), and authority was given to issue notes to any amount over twenty millions, on holding dollar for dollar beyond that sum. In 1903 (3 Edw. VII, c. 43) the Minister of Finance was required to hold gold and guaranteed debentures of not less than 25 p.c. on Dominion notes issued and outstanding up to thirty million dollars; beyond thirty millions he was required to hold gold equal to the excess. The Dominion Notes Act of 1914 (5 Geo. V, c. 4), passed in the short war session of August, 1914, provided that a gold reserve of not less than 25 p.c. should be held against issues of Dominion notes up to $50,000,000 and dollar for dollar against the excess. In the same session, the Government was given power, by 5 Geo. V, c. 3, "in case of war, invasion, riot or insurrection, real or apprehended, and in case of any real or apprehended financial crisis", by proclamation to authorize the issue of Dominion notes to the chartered banks upon their pledge of approved securities deposited with the Minister of Finance. This was made a regular and permanent feature of the system by c. 48 of the Statutes of 1923, consolidated as c. 70, R.S.C, 1927, as stated above.

$500, $1,000, but for a considerable time no notes of $4, $50 or $100 denomination have been issued. "Special" notes are mainly of $5,000 or $50,000 denominations, $1,000 "specials" being no longer issued. The amounts of each denomination of both types of notes in circulation are given, as at Mar. 31 of each recent year, in Table 7, while Tables **5** and **6** are concerned with gold reserves.

5.—Dominion Notes Outstanding and Reserves as at June 30, 1890-1932.

As at June 30—	Notes Outstanding.[1]					Reserves of Specie.	Notes Outstanding Uncovered by Specie.[5]	Percentage of Specie Reserves to Notes Outstanding.
	Small Notes, $1,2,4 and 5, and Fractionals.[2]	Large Notes, $50, 100, 500, 1,000, 5,000[3]	Totals.					
			Amount.	Per capita.	Index No.[4]			
	$	$	$	$		$	$	p.c.
1890.......	6,665,942	8,691,950	15,357,892	3·21	65	3,285,515	10,125,711	21
1891.......	6,768,666	9,407,650	16,176,316	3·34	68	3,887,027	10,452,623	24
1892.......	6,898,348	10.384,350	17,282,698	3·54	72	5,061,577	10,414,455	29
1893.......	7,136,743	11,311,750	18,448,493	3·74	76	6,449,348	10,052,479	35
1894.......	6,967,818	13,093,900	20,061,718	4·03	82	8,292,405	9,822,647	41
1895.......	7,059,331	12,460,900	19,520,231	3·88	79	7,761,084	9,812,481	40
1896.......	7,377,096	12,995,100	20,372,196	4·01	81	8,758,252	9,667,295	43
1897.......	7,519,345	14,798,750	22,318,095	4·36	89	10,723,649	9,650,780	48
1898.......	8,157,243	14,020,950	22,178,193	4·28	87	10,813,739	9,417,788	49
1899.......	8,770,165	15,466,300	24,236,465	4·63	94	13,061,775	9,228,024	54
1900.......	9,640,473	16,454,450	26,094,923	4·92	100	12,476,044	11,672,213	48
1901.......	10,161,809	17,736,700	27,898,509	5·19	105	14,578,117	11,394,769	52
1902.......	11,029,985	21,750,400	32,780,385	5·96	121	18,901,639	11,932,080	58
1903.......	12,173,248	26,832,950	39,006,198	6·91	140	25,930,594	11,128,938	66
1904.......	12,581,833	28,992,950	41,574,783	7·13	145	23,422,625	16,205,492	56
1905.......	13,045,820	34,288,400	47,334,220	7·88	160	28,890,837	16,062,098	61
1906.......	14,633,576	35,307,850	49,941,426	8·06	164	29,013,931	18,980,829	58
1907.......	15,939,131	42,377,400	58,316,531	9·09	185	34,989,270	21,380,595	60
1908.......	15,279,675	47,778,450	63,058,125	9·52	194	39,141,184	21,950,275	62
1909.......	15,860,149	63,145,150	79,005,299	11·62	236	55,363,266	21,695,367	70
1910.......	17,871,477	71,414,250	89,285,727	12·78	260	66,409,121	20,929,940	74
1911.......	19,840,695	79,468,250	99,308,945	13·78	280	78,005,231	21,303,714	78
1912.......	22,982,588	88,949,650	111,932,238	15·14	308	92,442,098	19,490,140	82
1913.......	28,845,737	87,517,800	116,363,537	15·24	310	94,943,499	21,420,038	81
1914.......	24,586,448	89,595,650	114,182,098	14·49	294	92,663,575	21,518,523	81
1915.......	25,183,685	126,937,050	152,120,735	18·94	385	89,573,041	62,547,693	59
1916.......	27,283,425	148,213,750	175,497,175	21·93	446	114,071,032	61,426,143	66
1917.......	29,498,409	149,069,600	178,568,009	22·15	450	119,110,113	59,457,896	67
1918.......	32,623,514	248.716,000	281,339,514	34·52	701	114,951,618	166,387,896	41
1919.......	35,084,194	265,665,650	300,749,844	36·19	736	118,268,407	182,481,437	39
1920.......	37,203,890	254,812,400	292,016,290	34·13	694	95,538,190	196,478,100	33
1921.......	34,403,934	234,365,250	268,769,184	30·58	621	83,854,487	184,914,697	31
1922.......	31,404,161	201,344,250	232,748,411	26·08	530	85,495,068	147,253,343	37
1923.......	33,276,533	200,869,900	234,146,433	25·98	528	121,025,725	113,120,708	52
1924.......	34,816,442	175,492,150	210,308,592	22·99	467	96,732,954	113,575,638	46
1925.......	32,294,827	176,096,650	208,391,477	22·42	456	116,263,994	92,127,483	56
1926.......	32,512,285	143,200,630	175,712,915	18·58	378	94,999,481	80,713,434	54
1927.......	33,845,891	143,160,024	177,005,915	18·37	373	105,700,181	71,305,734	60
1928.......	35,051,708	165,703,650	200,755,358	20·42	415	80,756,302	119,999,056	40
1929.......	37,159,177	172,803,650	209,962,827	20·93	425	58,931,581	151,031,246	28
1930.......	37,029,484	137,189,150	174,218,634	17·07	347	65,719,661	108,498,973	38
1931.......	35,288,353	110,028,650	145,317,003	14·00	285	70,534,481	74,782,522	49
1932.......	38,586,871	129,686,650	168,273,521	16·01	325	64,849,441	103,424,080	39

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[1] Includes Dominion notes in the Central Gold Reserves as security for bank note circulation.

[2] Includes provincial notes amounting to $32,857 in 1890 and reduced to $27,594 on June 30, 1932.

[3] Includes issue of $50,000 notes, 1919-32.

[4] Per capita circulation in 1900 is taken as 100.

[5] The circulation uncovered by specie reserve was to a considerable extent covered, between 1890 and 1910, by the holdings of guaranteed debentures amounting to $1,946,666. Since 1914 a part of the issue of Dominion notes outstanding has been covered by the holding of securities approved under the Finance Act, 1914, and the Finance Act (R.S.C., 1927, c. 70).

6.—Gold Held by the Minister of Finance, calendar years, 1919-32.[1]

Calendar Year.	Gold Reserve Held on Postal Savings Bank Deposits.[2]	Gold Held for Redemption of Dominion Notes.	Total Gold Held by Minister of Finance.
	$	$	$
1919	4,909,675	118,489,692	123,399,367
1920	4,067,897	98,751,773	102,819,670
1921	3,666,009	84,568,064	88,234,073
1922	3,293,287	89,939,108	93,232,395
1923	3,154,358	120,651,627	123,805,985
1924	3,308,575	107,257,428	110,566,003
1925	3,241,490	119,744,819	122,986,309
1926	3,162,930	109,369,550	112,532,480
1927	3,083,440	107,417,631	110,501,071
1928	2,994,001	89,218,454	92,212,455
1929	2,709,169	59,345,233	62,054,402
1930	2,483,959	79,000,297	81,484,256
1931	2,405,030	74,209,510	76,614,540
1932	2,324,246	66,854,214	69,178,460

[1] Yearly averages. [2] In the Savings Bank Act (c. 15, R.S.C., 1927) it is provided that the Minister of Finance shall hold 10 p.c. gold reserve against postal savings bank deposits.

7.—Denominations of Dominion Notes in Circulation, Mar. 31, 1927-32.

Denomination.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
$1	17,428,021	18,100,000	19,277,085	18,943,815	18,193,832	18,655,811
$2	12,609,981	13,039,460	13,824,977	13,776,806	13,283,168	13,433,639
$4	33,071	32,635	32,223	31,887	31,455	31,083
$5	700,147	294,072	277,612	1,109,693	1,125,298	5,109,547
$50	650	650	650	650	650	650
$500	1,736,000	1,791,500	1,832,000	1,907,500	2,018,000	2,491,000
$1,000	4,103,000	4,244,000	4,289,000	4,569,000	4,496,000	6,143,000
$1,000 special	433,000	281,000	427,000	479,000	609,000	6,000
$5,000 special	9,950,000	7,810,000	7,570,000	6,700,000	8,255,000	7,990,000
$50,000 special	123,800,000	141,650,000	155,550,000	125,400,000	91,700,000	102,200,000
Fractional currency	1,346,145	1,360,549	1,392,463	1,380,648	1,326,251	1,299,856
Provincial notes	27,624	27,624	27,624	27,619	27,603	27,594
Totals	**172,167,639**	**188,631,490**	**204,509,633**	**174,326,618**	**141,066,257**	**157,388,180**

Bank Notes.—Bank notes form the chief circulating medium used in Canada. Under the Bank Act, the banks are authorized to issue notes of the denominations of $5 and multiples thereof to the amount of their paid-up capital. These notes are not in normal times legal tender.

In addition, during the period of the movement of the crops (Sept. 1 to Feb. 28-29), the banks may issue "excess" circulation to the amount of 15 p.c. of their combined capital and "rest" or reserve funds. In the event of war or panic the Government may permit the "excess" to run all the year. The banks pay interest on this excess at 5 p.c. If a bank desires to extend its circulation, it may also do so by depositing dollar for dollar in gold or Dominion notes in the Central Gold Reserves.

In case of insolvency the notes of a bank are a first lien upon its assets. Notes are further secured, in case of insolvency, by the Bank Note Circulation Redemption Fund, to which all banks contribute 5 p.c. of their average circulation not covered by gold or Dominion notes deposited in the Central Gold Reserves established in 1913. The sum thus secured is available for the redemption of the notes of failed banks.

The figures of bank note circulation are given in Table 8. Table 9 brings together the statistics of the amount of circulating media in the hands of the general public, yearly averages being used where possible. "In the hands of the general public" here includes coin and small Dominion notes in the tills of the banks used for making change as well as that outstanding among the general public, but does not include Dominion notes of denominations larger than five dollars which are used almost entirely for inter-bank transactions and reserves. In both Tables 8 and 9 "bank notes in circulation" include notes of other banks held by the banks, averaging about $11,000,000 in 1932. As for the silver, nickel and bronze coinage in Table 9, the figures are the total amounts issued by the Mint since 1858 less amounts withdrawn from circulation and therefore include amounts held by the banks as well as coins lost by the public, which over such a period would probably amount to a considerable sum.

8.—Statistics of Bank Note Circulation, calendar years, 1900-32.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year. Figures for 1892-99 will be found at p. 861 of the 1927-28 Year Book.

Calendar Year.	Paid up Capital.	"Rest" Fund.	Bank Note Circulation Redemption Fund. (Held by Minister of Finance.)	Bank Notes in Circulation.		
				Amount.	Per capita.	Index No. per capita.[1]
	$	$	$	$	$	
1900	65,154,594	32,372,394	2,221,128	46,574,780	8·79	100
1901	67,035,615	36,249,145	2,487,541	50,601,205	9·43	107
1902	69,869,670	40,212,943	2,832,401	55,412,598	10·08	115
1903	76,453,125	47,761,536	2,971,260	60,244,072	10·66	121
1904	79,234,191	52,082,335	3,237,891	61,769,888	10·60	121
1905	82,655,828	56,474,124	3,448,463	64,025,643	10·66	121
1906	91,035,604	64,002,266	3,923,531	70,638,870	11·40	130
1907	95,953,732	69,806,892	4,304,524	75,784,482	11·83	135
1908	96,147,526	72,041,265	4,249,367	71,401,697	10·78	123
1909	97,329,333	75,887,695	4,317,006	73,943,119	10·88	124
1910	98,787,929	79,970,346	4,844,475	82,120,303	11·65	133
1911	103,009,256	88,892,256	5,353,838	89,982,223	12·49	142
1912	112,730,943	102,090,476	6,211,881	100,146,541	13·55	154
1913	116.297,729	109,129,393	6,536,341	105,265,336	13·79	157
1914	114,759,807	113,130,626	6,693,684	104,600,185	13·28	151
1915	113,982,741	113,020,310	6,756,648	105,137,092	13·17	150
1916	113,175,353	112,989,541	6,811,213	126,691,913	15·84	180
1917	111,637,755	113,560,997	6,324,442	161,029,606	19·98	227
1918	110,618,504	114,041,500	5,817,646	198,645,254	24·38	277
1919	115,004,960	121,160,774	6,054,419	218,919,261	26·35	300
1920	123,617,120	128,756,690	6,122,715	228,800,379	26·75	304
1921	129,096,339	134,104,030	6,417,287	194,621,710	22·15	252
1922	125,456,485	129,627,270	6,493.593	166,466.109	18·66	212
1923	124,373,293	126,441,667	6,662,665	170,420,792	18·92	215
1924	122,409,504	123,841,666	6,347,378	166,136,765	18·17	207
1925	118,831,327	123,295,866	6,026,617	165,235,168	17·78	202
1926	116,638,254	125,441,700	5,790,572	168,885,995	17·87	203
1927	121,666,724	130,320,897	5,861,646	172,100,763	17·86	203
1928	122,839,879	134,087,485	6,027,466	176,716,979	17·97	205
1929	137,269,085	150,636,682	6,246,861	178,291.030	17·78	202
1930	144,560,874	160,639,246	6,590,934	159,341,085	15·61	178
1931	144,674,853	162,075,000	6,825,601	141,969,350	13·68	156
1932	144,500.000	162,000,000	6,721,355	132,165,942	12·58	143

[1] Circulation per capita in 1900 is taken as 100.

9.—Circulating Media in the Hands of the General Public, calendar years, 1900-32.

NOTE.—Includes till money in the hands of the banks. See p. 888.

Calendar Year.	Silver.[1]	Nickel.[1]	Bronze.[1]	Bank Notes.[2]	Dominion Notes,[2] \$1, \$2, \$4, \$5, and Fractionals.[3]	Totals.		
						Amount.	Per capita.	Index Number per capita.[4]
	$	$	$	$	$	$	$	$
1900...	7,911,998	–	635,429	46,574,780	9,997,044	65,119,251	12·28	100
1901...	8,279,924	–	676,429	50.601,205	10,595,169	70,152,727	13·06	106
1902...	9,053,924	–	706,429	55,412,598	11,442,138	75,615,089	13·76	112
1903...	9,687,774	–	746,429	60,244,072	12,321,172	82,999,447	14·69	120
1904...	10,037,774	–	771,429	61,769,888	12,813,912	85,393,003	14·65	119
1905...	10,487,774	–	791,429	64,025,643	13,499,894	88,804,740	14·80	121
1906...	11,295,235	–	832,429	70,638,870	14,797,483	97,564,017	15·74	128
1907...	12,489,235	–	864,429	75,784,482	15,973,227	105,111,373	16·39	134
1908...	12,527,776	–	886,033	71,401,697	15,615,082	100,430,588	15·16	123
1909...	13,176,476	–	925,333	73,943,119	16,235,774	104,280,702	15·33	125
1910...	14,372,662	–	967,353	82,120,303	18,098,111	115,513,429	16·52	135
1911...	15,670,663	–	1,021,628	89,982,223	21,497,429	128,171,943	17·78	145
1912...	16,973,900	–	1,041,605	100,146,541	27,277,341	145,469,387	19·68	152
1913...	17,901,031	–	1,127,177	105,265,336	29,067,278	153,360,822	20·09	164
1914...	18,527,229	–	1,162,234	104,600,185	26,964,063	151,253,711	19·19	156
1915...	18,588,573	–	1,212,588	105,137,092	25,881,570	150,819,823	18·89	154
1916...	19,768,089	–	1,323,234	126,691,913	27,857,543	175,640,779	21·94	179
1917...	21,559,030	–	1,440,034	161,029,606	31,221,311	215,249,981	26·71	218
1918...	23,888,121	–	1,571,811	198,645,254	34,146,836	258,252,022	31·68	258
1919...	27,084,148	–	1,686,822	218,919,261	35,492,643	283,182,874	34·08	278
1920...	28,384,850	–	1,895,783	228,800,379	37,272,725	296,353,737	34·63	282
1921...	28,344,569	–	1,956,326	194,621,710	33,825,582	258,748,277	29·44	240
1922...	28,151,444	69,000	1,968,068	166,466,109	31,888,024	228,542,645	25·62	209
1923...	28,052,347	196,000	1,987,186	170,420,792	33,387,155	234,043,480	25·98	212
1924...	27,863,502	270,488	1,998,616	166,136,765	34,332,178	230,601,549	25·22	205
1925...	27,713,019	396,471	2,020,470	165,235,168	32,175,284	227,540,412	24·49	200
1926...	27,433,463	564,865	2,043,833	168,885,995	32,675,174	231,603,330	24·51	200
1927...	27,104,534	813,784	2,080,196	172,100,763	33,689,474	235,788,751	24·47	199
1928...	27.737,963	1,063,627	2,171,657	176,716,979	35,093,625	242,793,302	24·69	201
1929...	28,638,195	1,330,498	2,290,789	178.291,030	36,811,966	247,362,478	24·66	201
1930...	28,562,330	1,494,525	2,297,405	159,341,085	36,431,368	228,126,713	22·35	182
1931...	28,706,348	1,775,139	2,346,054	141,969,350	36,465,462	211,262,353	20·36	166
1932...	28,853,740	1,939,923	2,558,962	132,165,942	38,788,027	204,306,594	19·45	158

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[1] Figures supplied by the Mint as at Dec. 31 of each year, are the net issues of coinage since 1858 (see Table 4, pp. 884 and 885).

[2] Yearly averages.

[3] Dominion notes of larger denominations in hands of banks are not included, but provincial notes, amounting to \$27,594 in 1932, are included.

[4] Per capita circulation in 1900=100.

Section 2.—Banking in Canada.

Historical.—In the early days of banking, one of the chief functions of banks was to issue promissory notes payable to the bearer on demand; where the bank's credit was good these notes passed freely from hand to hand, and were the chief circulating medium in the Canadas. In some cases in the Maritime Provinces bank notes were preferred to those issued by the Provincial Governments.

The need of a uniform circulating medium in Canada was felt by the merchants of Montreal toward the end of the eighteenth century, and the prospectus of a proposed bank of issue to be known as the Canada Banking Company was issued in 1792. This scheme, however, depended chiefly on the co-operation of British capital and was frustrated by the outbreak of war with France. A second project in 1808 for the incorporation of a Bank of Canada failed to secure the assent of the Legislature of Lower Canada.

At the close of the war of 1812 the army bill currency was withdrawn, and public attention once more turned to the expediency of securing a currency through the establishment of banks. The Bank of Montreal began business toward the end of 1817 as a private institution, under articles of association based on the first charter of the Bank of the United States. In the following year, under similar articles of association, the Quebec Bank was established, as well as the Bank of Canada at Montreal and the Bank of Upper Canada at Kingston. The three Lower Canadian institutions obtained their provincial charters in 1822, while the Bank of Upper Canada was superseded by a second Bank of Upper Canada established at York (Toronto) as a chartered bank in 1821. Meanwhile the Bank of New Brunswick had been incorporated in 1820, while in Nova Scotia the Halifax Banking Co. (private) commenced business in 1825, and the Bank of Nova Scotia received a regular charter in 1832. With all of these earlier banks note issue was an important part of their business.

The Bank of British North America, previously incorporated in Great Britain, commenced business in Canada in 1836, while Molson's Bank was established in 1853, the Bank of Toronto in 1855, the Banque Nationale in 1860 and the Banque Jacques-Cartier (later the Banque Provinciale du Canada) in 1862. The Union Bank was established in 1866, the Canadian Bank of Commerce in 1867. There were no fewer than 28 banks in existence at Confederation. These were as follows:—

Ontario and Quebec.

Bank of Montreal.
Quebec Bank.
Commercial Bank of Canada.
City Bank.
Gore Bank.
Bank of British North America.
Banque du Peuple.
Niagara District Bank.
Molson's Bank.
Bank of Toronto.
Ontario Bank.
Eastern Townships Bank.
Banque Nationale.
Banque Jacques-Cartier.
Merchants' Bank of Canada.
Royal Canadian Bank.
Union Bank of Lower Canada.
Mechanics' Bank.
Canadian Bank of Commerce.

Nova Scotia.

Bank of Yarmouth.
Merchants' Bank of Halifax.
People's Bank of Halifax.
Union Bank of Halifax.
Bank of Nova Scotia.

New Brunswick.

Bank of New Brunswick.
Commercial Bank of New Brunswick.
St. Stephen's Bank.
People's Bank of New Brunswick.

Subsection 1.—The Canadian Banking System in General.[1]

A brief résumé of the Canadian banking system must emphasize: (1) its growth, from the beginning closely related to the Montreal produce and export trade and to the commerce of Halifax and Saint John; (2) its development of the branch bank system in order to meet the demands of a rapidly moving frontier of settlement; (3) its adaptation to the requirements of the grain and cattle trade of the west; and (4) the consolidation during later years of the features which tended towards its early success. The development of a stable system has been accompanied by failures,[2] particularly marked about the middle of the 19th century, but progress has nevertheless been steady, based on sound principles, and adapted as closely as could be to the particular needs of the country.

The branch bank is perhaps the most distinctive feature of the Canadian system as it exists to-day, and for a country such as Canada, vast in area and with a small population, the plan has proved a good one. A result of the growth of branch banks has been the partially centralized system that now obtains—centralized as to banks, of which there are now 10, rather than as to districts as in the partially centralized system of the United States.

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[1] For details regarding Canadian bank note issue, see pp. 887 and 888. [2] See Table 23, pp. 908 and 909.

A second peculiarity of the system is the existence and operation of the Canadian Bankers' Association. Through this body, which was incorporated in 1900 and acts under the authority of the Dominion Treasury Board, co-operation of individual banks is facilitated and encouraged. The association supervises clearing-house transactions, appoints curators to supervise the affairs of banks which have suspended business, and oversees the printing and issue of notes to its members. Adherence to similar principles and a linking together of the credit of the system result from the co-operation secured through the association.

The elimination of weaker banks or their amalgamation with more stable institutions has been a progressive move towards greater efficiency. Co-operation between the banks and the Dominion Government has been made permanent through the medium of periodic returns and the regulation of note issues and reserves.

Apart from the many detailed services rendered to its clients, the Canadian banking system may be said to perform three main functions as follows:—

1. To put into circulation the paper currency which forms the circulating medium for small exchanges.

2. To provide a mechanism of exchange by the issue of bills of exchange, etc.

3. To form a means by which the credit of the banks and their unused deposits may be put to immediate productive use.

Banking Legislation.[1]—The history of Canadian banking legislation began over a century ago with the granting, between 1817 and 1822, of the Royal Assent to charters incorporating the Bank of New Brunswick, the Bank of Upper Canada, the Bank of Montreal, the Quebec Bank and the Bank of Canada. The right to issue bank notes existed and was exercised by private banks without legislative sanction for a considerable period after the early charters were granted, and before banks became the subject of general legislation. In Lower Canada the practical monoply of issue was conferred upon the chartered banks by an Act of 1830, whereby the total amount of notes of less than £1 ($4)[2] in circulation might not at any time exceed one-fifth of the paid-up capital, and no notes under 5 shillings ($1) might be issued, it being further provided that all issues of less than £1 might be limited or suppressed by the Legislature.

In 1841, in the first session of the Canadian Legislature after the Union, a tax of 1 p.c. was imposed upon bank note circulation, which was limited to the amount of paid-up capital, notes of less than £1 not to exceed one-fifth of such capital. Various charters granted or renewed after the Union included provisions prohibiting banks from holding shares of their own stock or granting advances there-against. They were also prohibited from lending on the security of lands, houses, ships or pledge of merchandise (though such could be taken as additional security for debts previously contracted) or holding lands or houses except for the transaction of their business, neither could they own ships or be engaged in trade except as dealers in bullion or bills of exchange, the object being to confine transactions to legitimate banking business. Statements of assets and liabilities were to be submitted periodically—half-yearly or yearly— and such further information as the Government might call for was to be supplied confidentially. A further and important enactment was the imposition of the double liability upon shareholders, which had not previously existed with respect to the banks of Lower Canada, although it had been for several years a requirement of the younger banks of Upper Canada and first appeared in British North America in the Act incorporating the Bank of Nova Scotia, enacted in 1832. Suspension of specie payments on demand for a period of 60 days, either consecutively or at intervals during one year, was to cause forfeiture of charter. Total liabilities were not to exceed thrice "the aggregate amount of capital stock paid in, and the deposit made in the bank in specie and Government securities for money", but this provision proved of doubtful utility.

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[1] Revised from information furnished by the Office of the Inspector-General of Banks, Department of Finance.

[2] In the "Old Currency" £1 was equivalent to $4 and 1 shilling to 20c.

In 1850 what was known as the "Free Banking Act" prohibited any but the chartered banks or other corporations or persons authorized under the new Act from issuing notes. A period of one year was allowed for banks or companies, whose right of issue was thus withdrawn, to retire their notes outstanding. It was provided that individuals or partners might establish banks, or joint stock companies with a minimum capital of £25,000 ($100,000) might be formed to carry on the business, but in such cases operations were to be confined to an office in only one place and total liabilities were not to exceed thrice the amount of paid-up capital. In order to issue notes the banks thus formed were obliged to deposit with the Receiver-General provincial or provincially guaranteed securities for not less than £25,000 ($100,000) par value, receiving therefor registered notes. The chartered banks already existing could surrender their right of circulation against assets and secure from the Receiver-General registered notes in return for the deposit of securities, which special issue was not subject to the 1 p.c. tax imposed by the Act of 1841. The legislation included provisions giving effect for the first time to the principle of making bank notes a preferred claim, it being stipulated with respect to any one-office banks established under the Act that, if securities against outstanding notes did not realize sufficient, the general assets of a bank, if wound up, were first to be applied towards the payment of its notes.

Legislation of 1851 increased the period allowed for the retirement of note issues not in conformity with previous legislation from one to five years, provided at least one-fourth of the average circulation during the year 1850—and not secured by the pledge of bonds—was retired annually. Provision was made for partial remission and entire exemption within a specified period from the tax on bank-note circulation, subject to certain restriction of such circulation. At the same time permission was granted to issue in excess of the restricted formula against gold or silver coin or bullion, or debentures of any kind issued by the Receiver-General, without requiring the banks actually to deposit such debentures and secure registered notes. The debentures, however, were to be applicable exclusively to the redemption of notes in case of failure. Monthly rather than half-yearly returns now became necessary. In 1853, to encourage the issue of "secured" notes, the issue was permitted in excess of paid-up capital to the extent of specie holdings or debentures receivable, although actual deposit of securities with the Receiver-General was not required. The tax of 1 p.c. was to be calculated only on the average circulation outstanding in excess of such specie and security holdings. Until 1858 banks charging or receiving interest at a rate higher than 6 p.c. were liable to onerous penalties. In that year it was enacted generally that any rate of interest might be exacted, but banks were prohibited from taking or stipulating for a higher rate than 7 p.c. In 1859, at the urgent request of the banks, a measure was passed authorizing them to make advances on the security of bills of lading and warehouse receipts covering certain commodities.

By 1861-2 free banking had practically run its course. In all, six banks had taken advantage of the legislation, one of which—the Bank of British North America—doubtless found it valuable. The others did not thrive. The Act was finally repealed by the Provincial Notes Act of 1866, which aimed at a gradual reduction in the volume of bank note circulation.

By Section 91 of the British North America Act, the right to legislate respecting banking, the incorporation of banks and the issue of paper money was assigned exclusively to the Dominion Parliament. A temporary measure was passed in 1867, largely by way of re-enactment until 1870 of previous legislation, but extending the powers of banks formerly incorporated by any of the provinces to the territory of the whole Dominion, and subjecting banks in New Brunswick and Nova Scotia to a tax of 1 p.c. upon the excess of their average notes in circulation above their average holdings of coin and bullion. (In these provinces there had been no general banking Act, special provisions being embodied in the respective charters which differed in only a few essential respects from those granted in Upper and Lower Canada.) It was re-enacted that banks were entitled to hold and dispose of mortgages on realty as additional security for debts already contracted and to acquire title to mortgaged property if necessary.

The Bank Act of 1870 provided that new banks must have a minimum paid-up capital of $200,000 and that at least 20 p.c. of the subscribed capital must be paid up in each year after the commencement of business A proposal to limit the liabilities of banks in relation to capital and specie and Government debenture holdings was not translated into legislation. Bank notes in circulation were not to exceed the amount of paid-up capital. The right to issue notes under $4 was withdrawn, largely in consideration of the abolition of the tax of 1 p.c. on note circulation. If possible up to 50 p.c., but in no case less than one-third of a bank's cash reserves were to be held in Dominion notes. Dividends were limited to 8 p.c. until or unless the bank's reserve fund was the equivalent of 20 p.c. of its paid-up capital. In case of the failure of a bank, double liability of shareholders became enforcible without waiting for the realization of the bank's general assets. Banks were required to transmit certified lists of shareholders annually, to be laid before Parliament. Any existing bank was permitted, on the authority of the shareholders, to apply for an extension of its charter, and the Governor in Council, upon the recommendation of the Minister of Justice and the Treasury Board, was empowered to extend such charter to 1881. Any suspension by a bank of payment of its liabilities for a period of 90 days would constitute insolvency, and operate as a forfeiture of its charter.

In 1871 the first comprehensive Banking Act of the Dominion was passed. A large part of the Statute was devoted to the re-enactment and consolidation of legislation already in force, although the measure of 1870 contained the main features of the Government's policy. The procedure relative to extension of charters laid down in the preceding year was superseded by this Act, which became the charter of the banks until July 1, 1881, that date being set in contemplation of regular decennial revisions. No new bank was permitted to commence business with less than $500,000 capital *bona fide* subscribed and $100,000 similarly paid up, with the further proviso that at least $200,000 must be paid up within two years after commencement of business. The sections respecting loans against warehouse receipts, etc., were thoroughly revised and difficulties of procedure removed. Banks were permitted to take security on commodities in store pending marketing, and also while undergoing conversion from the raw to the finished state. Advances were allowed upon security of shares of other banks. It was provided that a bank might charge any rate of interest or discount not exceeding 7 p.c., but that no higher rate should be recoverable. Monthly returns of assets and liabilities were required. Certain technical amendments were made to the Bank Act in 1872, 1873 and 1875. In 1879 the power to lend upon the security of shares of other banks was repealed.

At the first general revision of the Bank Act in 1880 (effective 1881), a note holder was definitely recognized as a preferred creditor, claims of the Dominion and Provincial Governments, respectively, ranking next in order of preference. Banks were prohibited from issuing notes under $5, higher denominations to be multiples of this sum. Dominion notes were now to constitute not less than 40 p.c. of the bank's cash reserves. Monthly returns of a more detailed character were to be made. The Act was amended in 1883 so as more effectively to enforce the prohibitions, restrictions and duties already imposed upon the banks. The use of certain titles by private bankers not operating under the provisions of the Act was prohibited.

At the revision of 1890 (effective 1891), it was stipulated that not less than $250,000 capital must be paid up before a certificate permitting a bank to commence business could be issued by the Treasury Board. A period of one year from the date of the charter was allowed for the payment of the capital and the carrying out of other preliminaries. Dividends were not to exceed 8 p.c. until or unless the reserve fund was the equivalent of 30 p.c. of the paid-up capital. A fund known as the "Bank Note Circulation Redemption Fund" was established, consisting of deposits made by the banks with the Minister of Finance of amounts equal to 5 p.c. of their average note circulation, such deposits to be subject to adjustment annually, and to constitute a guarantee of the payment of all notes of a suspended bank with interest at 6 p.c. from the date of suspension until the date when their redemption was undertaken by the liquidator. Failing action by the liquidator within two months, the Minister of Finance was authorized to redeem the notes out of the fund, and such outlay, if not made good out of the assets of the failed bank, was to be reimbursed by the contributing banks *pro rata* to their contributions. Another major change gave the banks, in certain classes of loans, the same legal power to take security over the borrowers' goods as had previously been granted by warehouse receipts. This enactment served to make general and more clear principles already recognized by previous legislation and practice. Directors' qualifications were set out more clearly and it was now provided that a majority only of directors, instead of all, need be British subjects. Penalties for the excessive issue of circulation were made more severe.

The revision of 1900 (effective 1901) recognized the Canadian Bankers' Association as an agency in the supervision and control of certain activities of the banks. It was charged, under the Treasury Board, with the responsibility of supervising the printing and distribution of notes to the banks and their issue and destruction; also with control over clearing houses and the appointment of curators to supervise the affairs of suspended banks. The amended Act also included provisions permitting one bank to sell its assets to another. More detailed monthly returns were required and the interest on notes of failed banks was reduced from 6 p.c. to 5 p.c. In 1908, after the financial crisis of 1907, provision was made for emergency circulation during the crop moving season from October to January, when banks were allowed to issue excess circulation up to 15 p.c. of their combined paid-up capital and rest or reserve funds, this emergency circulation to be taxed at a rate not exceeding 5 p.c. per annum. In 1912, the period was extended to the six months from September to February inclusive.

At the fourth revision of the Bank Act in 1913 provision was made for an audit of each bank's affairs by auditors appointed by the shareholders. There was also provision for the establishment of Central Gold Reserves in which banks might deposit gold or Dominion notes for the purpose of issuing additional notes of their own there-against. Annual reports to the Minister of the fair market value of real and immovable property held by the banks for their own use were required. Banks were empowered to lend to farmers upon security of their threshed grain. As a war measure the provision for emergency circulation was extended in 1914 to cover the whole year and banks were further authorized to make payments in their own notes instead of in gold or Dominion notes.

The fifth revision of 1923 (13-14 Geo. V, c. 32) resulted in numerous important changes. The qualifications of provisional directors were re-defined, while provision was made for keeping records of attendance at directors' meetings and bringing them to the notice of shareholders. Annual and monthly statements were given further attention and more complete returns required, including statements of controlled companies in the names of which any part of a bank's operations were carried on. Other or special returns were to be made if called for by the Minister. Two auditors were now to be appointed by the shareholders instead of one, and the qualifications, duties and responsibilities of auditors were more clearly defined. The personal liability of directors in case of distribution of profits in excess of legal limits was also more definitely expressed. Regulations regarding loans were amended and advances to any officer or clerk of a bank could not, in any circumstances, be granted in excess of $10,000. Registration of security for loans under Sec. 88 was provided for. It became necessary for guarantee and pension funds to be invested in trustee securities. The punishment of directors and other bank officials for making false statements of a bank's position was provided for in Sec. 153. In 1924, as a result of the failure of the Home Bank of Canada, provision was made for periodical examination of the chartered banks by an Inspector-General of Banks, who was to be an officer of the Department of Finance.

Banking Statistics.—In Table **10** is given an historical summary of Canadian banking business since Confederation. In order to afford a clear view of the nature of banking transactions in Canada, bank liabilities have been classified in two main groups, liabilities to shareholders and liabilities to the public, only the latter group being ordinarily considered when determining the financial position of any such institution. Assets are divided into four groups, other assets being included in the total. As of interest to students of banking practice, the relative rates of increase of capital and reserve funds may be noted on the accompanying graphs, also the great increase in the proportion of liabilities to the public to total liabilities, and the gradually increasing percentage of liabilities to the public to total assets. The declining proportion of notes in circulation to total liabilities to the public is also characteristic of the evolution of banking in recent times. Holdings of Dominion and Provincial Government and municipal securities were relatively insignificant prior to the Great War.

10.—Historical Summary showing Development of the Canadian Banking Business, calendar years, 1867-1932.

NOTE.—The statistics in this table are yearly averages computed from the twelve monthly returns.

LIABILITIES.

Calendar Year.	Liabilities to Shareholders.		Liabilities to the Public.				
	Capital.	Rest or Reserve Fund.	Notes in Circulation.	Deposits payable on Demand in Canada.	Deposits payable after Notice or on a Fixed Day in Canada.	Total on Deposit.[1]	Total Liabilities to the Public.[2]
	$	$	$	$	$	$	$
1867[3]......	30,926,470	–	9,346,081	–	–	31,375,316	43,273,969
1868......	30,507,447	–	9,350,646	–	–	33,653,594	45,144,854
1869......	30,782,637	–	9,539,511	–	–	40,028,090	50,940,226
1870......	33,031,249	–	15,149,031	–	–	48,763,205	65,685,870
1871......	37,095,340	–	20,914,637	–	–	56,287,391	80,250,974
1872......	45,190,085	–	25,296,454	–	–	61,481,452	90,864,688
1873......	54,690,561	–	27,165,878	–	–	65,426,042	98,982,668
1874......	60,388,340	–	27,904,963	–	–	77,113,754	116,412,392
1875......	64,619,513	–	23,035,039	–	–	74,642,446	104,609,356
1876......	66,804,398	–	21,245,935	–	–	72,852,686	99,614,014
1877......	65,206,009	–	20,704,338	–	–	74,166,287	99,810,731
1878......	63,682,863	–	20,475,586	–	–	70,856,253	95,538,831
1879......	62,737,276	–	19,486,103	–	–	73,151,425	96,760,113
1880......	60,052,117	–	22,529,623	–	–	85,303,814	111,838,941
1881......	59,534,977	–	28,516,692	–	–	94,346,481	127,176,249
1882......	59,799,644	–	33,582,080	–	–	110,133,124	149,777,214
1883......	61,390,118	–	33,283,302	–	–	107,648,383	145,938,095
1884......	61,579,021	18,149,193	30,449,410	–	–	102,398,228	137,493,917
1885......	61,711,566	17,879,716	30,720,762	–	–	104,014,660	138,762,695
1886......	61,662,093	17,817,693	31,030,499	–	–	111,449,365	146,954,260
1887......	60,860,561	17,873,582	32,478,118	–	–	112,656,985	149,704,402
1888......	60,345,035	18,529,911	32,205,259	–	–	125,136,473	163,990,797
1889......	60,229,752	19,766,426	32,207,144	–	–	134,650,732	173,029,602
1890......	59,974,902	21,127,838	32,834,511	–	–	135,548,704	173,207,587
1891......	60,700,697	22,821,501	33,061,042	–	–	148,396,968	187,332,325
1892......	61,626,311	24,511,709	33,788,679	–	–	160,668,471	208,062,169
1893......	62,009,346	25,837,753	33,811,925	–	–	174,776,722	217,195,975
1894......	62,063,371	27,041,235	31,166,003	–	–	181,743,890	221,066,724
1895......	61,800,700	27,273,500	30,807,041	–	–	190,916,939	229,794,322
1896......	62,043,173	26,526,632	31,456,297	–	–	193,616,049	232,338,086
1897......	62,027,703	27,087,782	34,350,118	–	–	211,788,096	252,660,708
1898......	62,571,920	27,627,520	37,873,934	–	–	236,161,062	281,076,656
1899......	63,726,399	28,958,989	41,513,139	–	–	266,504,528	318,624,033
1900......	65,154,594	32,372,394	46,574,780	–	–	305,140,242	356,394,095
1901......	67,035,615	36,249,145	50,601,205	95,169,631	221,624,664	349,573,327	420,003,743
1902......	69,869,670	40,212,943	55,412,598	104,424,203	244,062,545	390,370,493	466,963,829
1903......	76,453,125	47,761,536	60,244,072	112,461,757	269,911,501	424,167,140	507,527,550
1904......	79,234,191	52,082,335	61,769,888	117,962,023	307,007,192	470,265,744	554,014,076
1905......	82,655,828	56,474,124	64,025,643	138,116,550	338,411,275	531,243,476	618,678,633
1906......	91,035,604	64,002,266	70,638,870	165,144,569	381,778,705	605,968,513	713,790,553
1907......	95,953,732	69,806,892	75,784,482	166,342,144	413,014,657	654,839,711	769,026,924
1908......	96,147,526	72,041,265	71,401,697	169,721,755	406,103,063	658,367,015	762,077,184
1909......	97,329,333	75,887,695	73,943,119	225,414,828	464,635,263	783,298,880	882,598,547
1910......	98,787,929	79,970,346	82,120,303	260,232,399	532,087,627	909,964,839	1,019,177,601
1911......	103,009,256	88,892,256	89,982,223	304,801,755	568,976,209	980,433,788	1,097,661,393
1912......	112,730,943	102,090,476	100,146,541	359,431,895	625,705,765	1,102,910,383	1,240,124,354
1913......	116,297,729	109,129,393	105,265,336	367,214,143	626,199,470	1,126,871,523	1,287,372,534
1914......	114,759,807	113,130,626	104,600,185	346,069,908	656,760,687	1,144,211,363	1,309,944,006
1915......	113,982,741	113,020,310	105,137,092	358,444,252	690,904,274	1,198,340,315	1,353,629,123
1916......	113,175,353	112,989,541	126,691,913	428,717,781	780,842,383	1,418,035,429	1,596,905,337
1917......	111,637,755	113,560,997	161,029,606	468,049,790	928,271,838	1,643,203,020	1,866,228,236
1918......	110,618,504	114,041,500	198,645,254	587,342,904	966,341,499	1,912,395,780	2,184,359,820
1919......	115,004,960	121,160,774	218,919,261	621,676,065	1,125,202,403	2,189,428,885	2,495,582,568
1920......	123,617,120	128,756,690	228,800,379	653,862,869	1,239,308,076	2,438,079,792	2,784,068,698
1921......	129,096,339	134,104,030	194,621,710	551,914,643	1,289,347,063	2,264,586,736	2,556,454,190
1922......	125,456,485	129,627,270	166,466,109	502,781,234	1,191,637,004	2,120,997,030	2,364,822,657
1923......	124,373,293	126,441,667	170,420,792	523,170,930	1,197,277,065	2,107,606,111	2,374,308,376
1924......	122,409,504	123,841,666	166,136,765	511,218,736	1,198,246,414	2,130,621,760	2,438,771,001
1925......	118,831,327	123,108,366	165,235,168	531,180,578	1,269,542,584	2,221,160,611	2,532,832,064
1926......	116,638,254	125,441,700	168,885,995	553,322,935	1,340,559,021	2,277,192,043	2,604,601,786
1927......	121,666,774	130,320,897	172,100,763	596,069,007	1,399,062,201	2,415,132,260	2,758,324,713
1928......	122,839,879	134,087,485	176,716,979	677,467,295	1,496,608,451	2,610,594,865	3,044,742,165
1929......	137,269,085	150,636,682	178,291,030	696,387,381	1,479,870,058	2,696,747,857	3,215,503,098
1930......	144,560,874	160,639,246	159,341,085	622,895,347	1,427,569,716	2,516,611,587	2,909,530,263
1931......	144,674,853	162,075,000	141,969,350	578,604,394	1,437,976,749	2,422,834,828	2,741,554,219
1932......	144,500,000	162,000,000	132,165,942	486,270,764	1,376,325,128	2,256,639,530	2,546,149,789

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[1] Includes the deposits of Dominion and Provincial Governments and also since 1901 deposits elsewhere than in Canada. [2] Includes other liabilities to the public. [3] Six months' average.

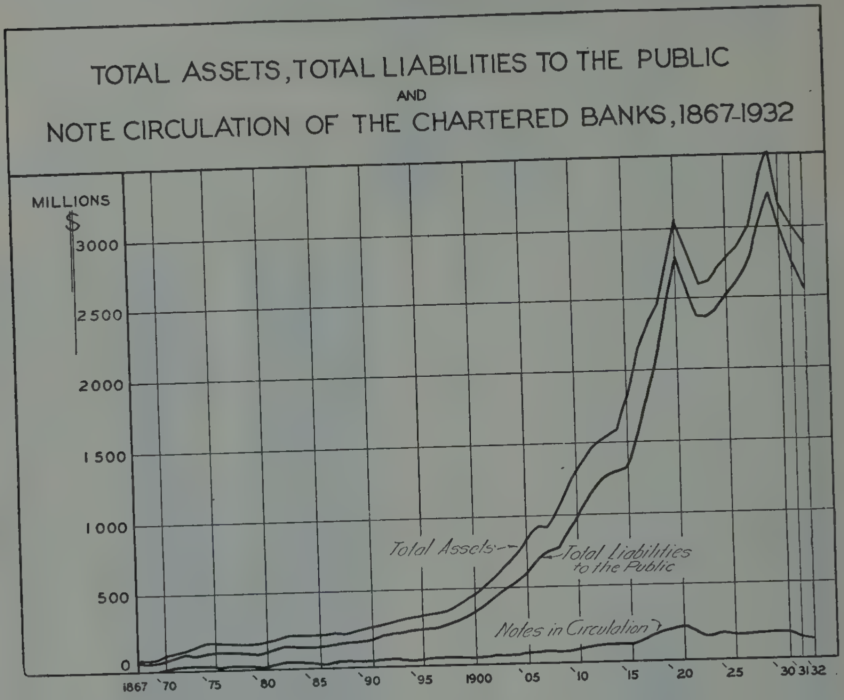
10.—Historical Summary Showing Development of the Canadian Banking Business, calendar years, 1867-1932—concluded.

NOTE.—The statistics in this table are yearly averages computed from the twelve monthly returns.

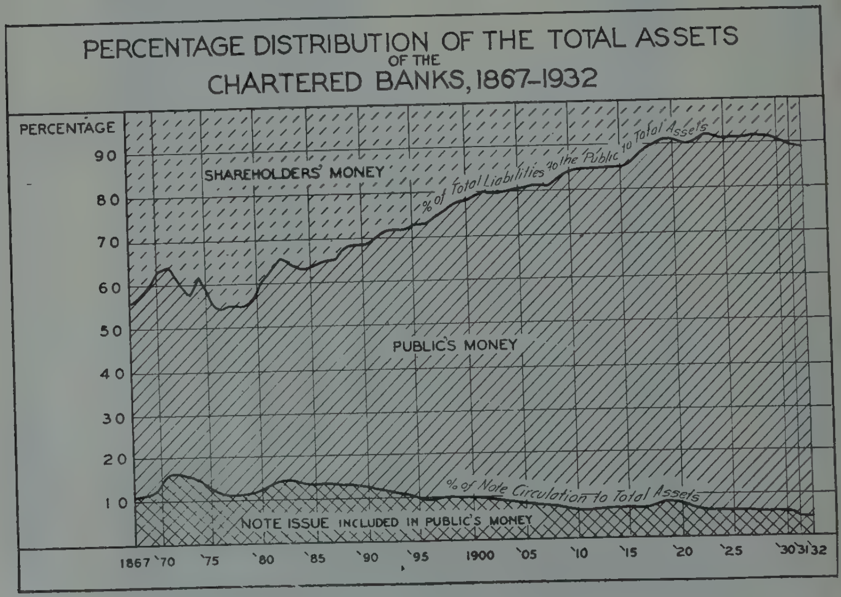
ASSETS.

Calendar Year.	Specie and Dominion Notes (including Deposits in Central Gold Reserves 1913-32).	Dominion and Provincial Government Securities.	Municipal Securities in Canada and Public Securities elsewhere than in Canada.	Total Loans.	Total Assets.[1]	Percentage of Liabilities to the Public to Total Assets.[1]
	$	$	$	$	$	p.c.
1867[2]	-	-	-	53,889,703	78,294,670	55·27
1868	-	-	-	52,299,050	79,860,976	56·53
1869	-	-	-	56,433,953	86,283,693	59·04
1870	-	-	-	66,276,961	103,197,103	63·65
1871	-	-	-	84,799,841	125,273,631	64·06
1872	-	-	-	106,744,665	148,862,445	61·04
1873	-	-	-	119,274,317	166,056,595	56·60
1874	-	-	-	131,680,111	187.921,031	61·95
1875	-	-	-	136,029,307	186,255,330	56·17
1876	-	-	-	127,621,577	183,499,801	54·29
1877	-	-	-	125,681,658	181,019,194	55·14
1878	-	-	-	119,682,659	175,450,274	54·45
1879	-	-	-	113,485,108	173,548,490	55·75
1880	-	-	-	102,166,115	184,276,190	60·69
1881	-	-	-	116,953,497	200,613,879	63·39
1882	-	-	-	140,077,194	227,426,835	65·86
1883	-	-	-	143,944,957	228,084,650	63·98
1884	-	-	-	130,490,053	219,998,642	62·50
1885	-	-	-	126,827,792	219.147,080	63·32
1886	-	-	-	132,833,313	228,061,872	64·44
1887	-	-	-	139,753,755	230,393,072	64·98
1888	-	-	-	141,002,373	243,504,164	67·35
1889	-	-	-	149,958,980	253,789,803	68·18
1890	-	-	-	153,301,335	254,546,329	68·05
1891	-	-	-	171,082,677	269,307,032	69·56
1892	17,794,201	-	-	193,455,883	291,635,251	71·34
1893	19,714,648	-	-	206,623,042	302,696,715	71·75
1894	22,371,954	-	-	204,124,939	307,520,020	71·87
1895	22,992,872	-	-	203,730,800	316,536,510	72·50
1896	22,318,627	-	-	213,211,996	320,937,643	72·39
1897	24,178,151	-	-	212,014,635	341,163,505	74·06
1898	25,330,564	-	-	223,806,320	370,583,991	75·86
1899	26,682,971	-	-	251,467,076	412,504,768	77·24
1900	29,047,382	-	-	279,279,761	459,715.065	77·52
1901	32,088,501	11,331.385	13,031,176	388,299,888	531,829,324	78·97
1902	35,478,598	9,804,998	14,487,632	430,662,670	585,761,109	79·72
1903	42.510,574	11,186,607	14,896,472	472,019.689	641,543,226	79·11
1904	50,307,871	10,705,202	15,560,145	509,011,993	695,417,756	79·67
1905	56,590.323	8,833,626	18,820,985	559.814,918	767,490,183	80·61
1906	61,287,581	9,360,614	20,460,670	655.869,879	878,512,076	81·25
1907	70,550,520	9,546,927	21,198,817	709,975,274	945.685,708	81·32
1908	80.654,276	9,522,743	19,788,937	670,170,833	941,290.619	80·96
1909	95.558,461	11,653,798	21,707.363	762,195,546	1,067,007,534	82·72
1910	104.735,626	14.741,621	21,696,987	870,100,890	1.211,452,351	84·13
1911	120,146,690	10,637,580	22,848,170	926.909,616	1.303,131,260	84·23
1912	132,853.405	9,388,968	22,586,119	1,061,843,991	1,470,065.478	84·36
1913	141,872,884	9.995,237	23,183,162	1,109,493,263	1,530,093,671	84·14
1914	165,845,957	11,697,603	22,707,738	1,101.880,924	1,555,676,395	84·20
1915	208,438,854	12,814,898	31,553.091	1,066,252,854	1,596,424,643	84·75
1916	230,113,831	29.717,007	117,902,686	1,135,866,531	1,839,286,709	86·82
1917	265.389,567	131,078.854	138,341,125	1,219,161,252	2,111.559,555	88·38
1918	351,762,841	162,821,026	252,936,568	1,339,660,669	2.432,331.418	89·81
1919	370,775,723	214,621,625	256,270,715	1.552,971,202	2,754,568,118	90·60
1920	367,165,054	120,356,255	210,826,991	1,935,449,637	3.064,133,843	90·86
1921	335,081,032	166,688,146	156,552,503	1.781,184,781	2,841,782,079	89·96
1922	305,522,425	198,826,031	90,131,491	1,643.643,443	2,638,776,483	89·62
1923	291,999,879	242.292.315	112,642,627	1,606,932.483	2,643,773,986	92·16
1924	266,961,330	314,099,097	135,597,860	1,546,792.080	2,701,427,011	90·28
1925	259,714,043	358,344,887	147.563.292	1,562.017,009	2,789,619,061	90·80
1926	252,754,268	343,595,936	127,765.375	1,682,379,658	2,864,019,213	90·94
1927	252,188,447	324,580,796	133.314,843	1,839.905,275	3,029,680,616	91·04
1928	264,804,251	333,837,004	124,996,823	2,072,403,628	3,323,163,195	91·62
1929	261,625,173	341.744.572	104,309,024	2.279,247.504	3,528,468,027	91·13
1930	232,016,616	316,196,343	101,585,131	2,064,597,746	3,237,073,853	89·88
1931	207,983,857	454,386,965	154,829,056	1,764,088,477	3,066,018,472	89·42
1932	206,925.103	489.709,241	150,891,599	1,582,667,313	2.869,429,779	88·73

[1] Includes other assets. [2] Six months' average.



TOTAL ASSETS, TOTAL LIABILITIES TO THE PUBLIC AND NOTE CIRCULATION OF THE CHARTERED BANKS, 1867-1932



PERCENTAGE DISTRIBUTION OF THE TOTAL ASSETS OF THE CHARTERED BANKS, 1867-1932

Bank Assets and Liabilities.—Tables **11** and **12** show in detail the assets and liabilities of Canadian chartered banks for the four years 1929 to 1932, the figures being yearly averages of the totals shown in the monthly statements made to the Minister of Finance.

11.—Assets of Chartered Banks in the calendar years 1929-32.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Assets.	1929.	1930.	1931.	1932.
	$	$	$	$
Quick Assets—				
Current gold and subsidiary coin	71,783,435	72,665,124	70,616,401	58,581,872
Dominion notes	130,227,539	119,220,626	111,324,018	126,373,999
Deposit with Minister of Finance for security of note circulation	6,246,861	6,590,934	6,825,601	6,721,355
Deposit in Central Gold Reserves	59,614,199	40,130,866	26,043,438	21,969,232
Notes of other banks	16,807,334	15,162,266	13,088,109	11,247,365
United States and other foreign currencies	19,468,671	18,775,238	16,264,313	16,022,766
Cheques of other banks	149,545,199	127,661,545	101,543,160	82,948,867
Deposits made with and balances due from other banks in Canada	4,698,323	5,696,508	4,274,869	3,461,775
Due from banks and banking correspondents in the United Kingdom	4,826,444	6,835,485	4,503,753	9,383,994
Due from banks and banking correspondents elsewhere than in Canada and the United Kingdom	86,178,585	94,240,248	97,749,022	97,999,358
Totals, Quick Assets	**549,396,590**	**506,978,840**	**452,232,684**	**434,710,583**
Other Liquid Assets—				
Dominion Government and Provincial Government securities	341,744,572	316,196,343	454,386,965	489,709,241
Canadian municipal securities, and British, foreign and colonial public securities other than Canadian	104,309,024	101,585,131	154,829,056	150,891,599
Railway and other bonds, debentures and stocks	52,961,542	53,856,068	65,141,210	55,157,961
Call and short (not exceeding thirty days) loans in Canada on stocks, debentures and bonds	267,271,438	226,725,099	170,185,313	117,224,745
Call and short (not exceeding thirty days) loans elsewhere than in Canada	301,091,053	187,706,019	108,574,302	84,227,574
Totals, Other Liquid Assets	**1,067,377,629**	**886,068,660**	**953,116,846**	**897,211,120**
Other Assets—				
Other current loans and discounts in Canada	1,342,666,883	1,285,836,995	1,123,600,856	1,032,081,481
Other current loans and discounts elsewhere than in Canada	248,367,887	238,954,152	205,382,064	171,861,621
Loans to the Government of Canada	-	-	-	-
Loans to the Provincial Governments	19,002,655	17,491,292	29,072,924	34,386,119
Loans to cities, towns, municipalities and school districts	93,325,211	100,233,545	117,970,493	130,567,792
Overdue debts	7,522,377	7,650,644	9,302,525	12,317,980
Real estate, other than bank premises	5,618,820	5,472,741	6,244,727	7,141,708
Mortgages on real estate sold by the bank	7,221,774	7,023,730	6,488,987	6,244,908
Bank premises at not more than cost, less amounts (if any) written off	75,536,822	77,465,028	79,112,291	79,714,603
Liabilities of customers under letters of credit as *per contra*	100,473,805	90,355,973	67,896,512	48,671,585
Other assets not included under the foregoing heads	11,957,574	13,542,253	15,597,563	14,520,279
Totals, Other Assets	**1,911,693,808**	**1,844,026,353**	**1,660,668,942**	**1,537,508,076**
Grand Totals, Assets	**3,528,468,027**	**3,237,073,853**	**3,066,018,472**	**2,869,429,779**

12.—Liabilities of Chartered Banks in the calendar years 1929-32.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Liabilities.	1929.	1930.	1931.	1932.
	$	$	$	$
Liabilities to the Public—				
Notes in circulation	178,291,030	159,341,085	141,969,350	132,165,942
Balance due to Dominion Government after deducting advances for credits, pay lists, etc.	77,815,312	47.706,626	48.978,777	55,598,660
Advances under the Finance Act	82,916,667	37,308,333	19,416,666	37,352,667
Balances due to Provincial Governments	24,536,732	28,036,339	24,372,336	26,151,681
Deposits by the public payable on demand in Canada	696,387,381	622,895,347	578,604,394	486,270,764
Deposits by the public payable after notice or on a fixed day in Canada	1,479,870,058	1,427,569,716	1,437,976,749	1,376,325,128
Deposits elsewhere than in Canada	418,138,374	390,403,559	332,902,489	312,293,297
Deposits made by and balances due to other banks in Canada	14,528,474	14,831,131	12,596,946	10,694,683
Due to banks and banking correspondents in the United Kingdom	25.693.879	11,539,556	5,301,868	5,131,001
Due to banks and banking correspondents elsewhere than in Canada and the United Kingdom	100,254.711	64,076,035	62,055,917	49,732,341
Bills payable	10,842,329	9.187,617	4,489,370	1,579,945
Acceptances under letters of credit	100,473,804	90,355,973	67,896,762	48,671,585
Liabilities not included under foregoing heads	5,754,347	6,278,946	4,992,595	4,182,095
Totals, Liabilities to the Public	**3,215,503,098**	**2,909,530,263**	**2,741,554,219**	**2,546,149,789**
Liabilities to Shareholders—				
Capital paid up	137,269,085	144,560,874	144,674,853	144,500,000
Amount of rest or reserve fund	150,636,682	160,639,246	162,075,000	162,000,000
Totals, Liabilities to Shareholders	**287,905,767**	**305,200,120**	**306,749,853**	**306,500,000**
Grand Totals, Liabilities	**3,503,408,865**	**3,214,730,383**	**3,048,304,073**	**2,852,649,789**

Deposits, Loans and Discounts.—As an index of the course of banking business, of the nature of many transactions undertaken and of the general security of bank assets, loans and discounts are of great value. They illustrate clearly the channels into which a large proportion of the potential earning power of the banks is directed, and, by providing a comparison between investments made in lending operations inside and outside of Canada, afford essential information regarding the conduct by a bank of one of its most important activities.

Bank deposits (the demand deposits being to a large extent the product of lending operations, by which credit is advanced on security followed by the deposit of the proceeds of a loan) are also of considerable importance, and, on account of their derivation, are one of the most valuable records of the volume of business done at any time. Actual deposits of cash (mainly deposits payable after notice or on a fixed day) are, of course, included with the amounts deposited after the granting of loans.

Tables **13** and **14**, following, give the deposits and loans of Canadian chartered banks for the years 1928 to 1932.

13.—Deposits in Chartered Banks in Canada and elsewhere, for the calendar years 1928-32.

Note.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Deposits by the public in Canada—					
Payable on demand	677,467,295	696,387,381	622,895,347	578,604,394	486,270,764
Payable after notice or on a fixed day	1,496,608,451	1,479,870,058	1,427,569,716	1,437,976,749	1,376,325,128
Deposits elsewhere than in Canada	372,452,532	418,138,374	390,403,559	332,902,489	312,293,297
Balances due to Dominion and Provincial Governments	64,066,587	102,352,044	75,742,965	73,351,113	81,750,341
Totals, Deposits	**2,610,594,865**	**2,696,747,857**	**2,516,611,587**	**2,422,834,828**	**2,256,639,530**

14.—Loans of Chartered Banks in Canada and elsewhere, for the calendar years 1928-32.

Note.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Item.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Call and short loans on stocks and bonds in Canada	253,488,198	267,271,438	226,725,099	170,185,313	117,224,745
Call and short loans elsewhere than in Canada	267,352,621	301,091,053	187,706,019	108,574,302	84,227,574
Current loans in Canada[1]	1,252,556,650	1,435,992,094	1,386,070,540	1,241,571,349	1,162,649,273
Current loans elsewhere than in Canada	261,943,962	248,367,887	238,954,152	205,382,064	171,861,621
Loans to Governments	29,569,721	19,002,655	17,491,292	29,072,924	34,386,120
Overdue debts	7,492,476	7,522,377	7,650,644	9.302,525	12,317,980
Totals, Loans	**2,072,403,628**	**2,279,247,504**	**2,064,597,746**	**1,761,088,477**	**1,582,667,313**

[1] Includes loans to cities, towns, municipalities and school districts.

Bank Reserves.—The Bank Act contains no specific provisions as to the amount of gold to be held against either note circulation or general liabilities of a bank. It requires, however, that 40 p.c. of whatever cash reserves a bank finds it expedient to carry shall be in Dominion notes. A second provision instructs the Minister of Finance to arrange for the delivery of Dominion notes to any bank in exchange for specie. Thus the gold reserve against Dominion notes, to the extent that the notes are held by the banks, is reserve against banking operations, the Dominion Government being the custodian of the gold for the banks. The other cash element in bank reserves is specie in hand. In addition to this cash on hand, Canadian banks carry three other kinds of assets which are regarded as reserves, being funds more or less immediately available for the liquidation of liabilities. These are: (1) cash balances in banks outside of Canada; (2) call and short loans in New York (the favorite call loan market); and (3) readily marketable securities. These are shown, together with net liabilities, in Table **15**. In Table **16**, the ratio to net liabilities of each element of the reserves is shown.

15.—Bank Reserves in Detail and Total

NOTE.—The statistics in this table are averages computed from the twelve monthly

Calendar Year.	Specie, Dominion Notes and Foreign Currencies.[1]	Cash Due from— Banks in the United Kingdom.	Cash Due from— Banks elsewhere than in Canada and the United Kingdom.	Cash Due from— All Outside Banks.	Call and Short Loans elsewhere than in Canada.
	$	$	$	$	$
1901	32,088,501	5,598,939	12,811,524	18,410,463	40,620,238
1902	35,478,598	6,598,159	13,519,799	20,117,958	46,162,659
1903	42,510,574	5,638,954	14,192,232	19,831,186	38,025,662
1904	50,307,871	7,523,615	16,817,357	24,340,972	41,212,007
1905	56,590,323	9,960,560	19,201,939	29,162,499	51,452,955
1906	61,287,581	8,877,979	16,801,119	25,679,098	59,363,639
1907	70,550,520	6,027,157	15,363,728	21,390,885	52,907,513
1908	80,654,276	9,828,186	30,822,761	40,650,947	60,764,075
1909	95,558,461	10,311,864	31,779,144	42,091,008	119,728,263
1910	104,735,696	18,892,833	28,301,602	47,194,435	112,777,530
1911	120,146,690	21,122,092	29,695,985	50,818,077	91,097,704
1912	132,853,405	21,338,926	28,894,103	50,233,029	105,718,070
1913	135,267,623	13,329.642	28,238,329	41,567,971	98,608,615
1914	159,775,124	12,230,533	36,932,958	49,163,491	112,438,696
1915	200,113,021	20,824,559	43,781,939	64,606,498	118,896,692
1916	207,797,164	24,025,192	72,923,228	96,948,420	164,786,760
1917	210,475,400	17,885,648	53,021,952	70,907,600	157,430,643
1918	256,656,174	10,973,606	47,419,961	58,393,567	162,233,308
1919	257,429,889	12,359,426	50,904,693	63,264,119	163,227,204
1920	259,462,332	17,669,923	62,100,182	79,770,105	200,098,050
1921	255,474,332	12,857,830	60.885,266	73,743,096	172,137,325
1922	251,169,892	10,309,844	87,972,048	98,281,892	178,457,564
1923	234,501,513	8,090,470	54,358,289	62,448,759	198,047,516
1924	235,743,196	7,819,605	66,701,920	74,521,525	181,705,220
1925	230,011,447	8,583,316	59,921,935	68,505,251	225,461,687
1926	214,182,302	11,520,189	59,261,609	70,781,798	250,080,998
1927	210,433,492	9,790,411	61,793,595	71,584,006	268,536,339
1928	216,287,938	6,874,338	67,531,596	74,405,934	267,352,621
1929	221,479,645	4,826,444	86,178,585	91,005,029	301,091,053
1930	210,660,988	6,835,485	94,240,248	101,075,733	187,706,019
1931	198,204,732	4,503,753	97,749,022	102,252,775	108,574,302
1932	200,978,637	9,383,994	97,999,358	107,383,352	84,227,574

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[1] Does not include "Deposits with the Minister of Finance for security of the note circulation" of insolvent banks, nor "Deposits in the Central Gold Reserves", instituted in 1913 as a reserve against additional bank-note circulation. The average amounts of these deposits during each of the latest four years are shown in Table **11.**

Net Liabilities, calendar years, 1901-32.

returns in each year. Figures for 1892-1900 were given on pp. 872-873 of the 1927-28 Year Book.

Securities.				Total Reserves.[1]	Total Net Liabilities.[2]	Calendar Year.
Dominion and Provincial Government Securities.	Canadian Municipal, British, Foreign and Colonial Public Securities.	Railway and other Bonds.	Total.			
$	$	$	$	$	$	
11,331.385	13,031,176	30,440,258	54,802,819	145,322,021	405,915,468	1901
9,804,998	14,487,633	34,859,390	59,152,021	160,911,236	451,052,607	1902
11,186,607	14,896,472	37,800,893	63,883,972	164,251,394	489,439,303	1903
10,705,202	15,560,146	38,779,477	65,044,825	180,905,675	534,147,781	1904
8,833,627	18,820,985	39,974,520	67,629,132	204,834,909	595,027,264	1905
9,360,614	20,460,625	41,125,898	70,947,137	217,277,455	684,185,650	1906
9,546,760	21,198,817	41.239,589	71,985,166	216,834,084	737,505,039	1907
9,522,743	19,788,937	42,651,006	71.962,686	254,031,984	726,443,676	1908
11,653,798	21,707,363	50,783,614	84,144,775	341,522,507	844,098,072	1909
14,741,621	21,696,987	56,194.734	92,633,342	357,341,003	974,731,187	1910
10,637,580	22,848,170	60,909,240	94,394,990	356,457,461	1,044,712,367	1911
9,388,968	22,586,119	64,080,763	96,055,850	384,860,354	1,178,577,787	1912
9,995,237	23,183,161	70,713,075	103,891,473	379,329,682	1,222,752,292	1913
11,697,603	22,707,738	68,636,267	103,041,608	424,418,919	1,251,372,615	1914
12,814,898	31,553,091	74,020,538	118,388,527	502,004,738	1,298,018,989	1915
29,717,007	117,902,686	68,386,482	216,006,175	685,538,519	1,520,438,686	1916
131.078,854	183,341,125	58,958,908	373,378,887	812,192,530	1,771,264,882	1917
162,821,026	252,936,568	56,103,418	471,861,012	949,144,061	2,071,307,749	1918
214.621,625	256,270,715	54,429,301	525,321,641	1,009,242,583	2,363,044,215	1919
120,356,255	210,826,991	48,031,228	379,214,474	918,544,961	2,608,151,194	1920
166,688,146	156.552,503	45.728,878	368,969,527	870,324,280	2,393,459,361	1921
198,826,031	90.131,491	43.208,758	332,166,280	860,073,353	2,219,372,799	1922
242,292,315	112,642,627	46,857,264	401,792,206	896,789,994	2,222,479,569	1923
314,099,097	135,597,860	52,864,890	502,561,847	994,531,788	2,314.701,740	1924
358.344,887	147,563,292	59,597,468	565,505,647	1,089,484,032	2,396,104,380	1925
343,595,936	127,765,375	61,455,745	532,817,056	1,067,862,154	2,481,678,160	1926
324,580,796	133,314,843	63,075,762	520,971,402	1,071,525,239	2,616,056,053	1927
333,837,004	124,996,823	62,794,381	522,628,208	1,080,674,701	2,880,242,999	1928
341,744,572	104,309,024	52,961,542	499,015,138	1,112,590,865	3,062,844,009	1929
316,196,343	101,585,131	53,856,068	471,637,542	971,080,282	2,766,706,452	1930
454,386,965	154,829,056	65,141,210	674,357,232	1,083,389,041	2,626,922,950	1931
489,709,241	150,891,599	55,157,961	695,758,801	1.088,348,364	2,451,953,557	1932

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[2] Net liabilities are obtained by deducting from total liabilities to the public, as shown in Table 10, the items "Notes of other banks", "Cheques on other banks", and "Loans to other banks in Canada, secured, including bills rediscounted", which represent indebtedness within the system and are counterbalanced by credits within the system.

16.—Ratio of Bank Reserves to Net Liabilities,[1] calendar years 1901-32.

NOTE.—The statistics in this table are based upon the averages of the twelve monthly returns in each year given in the preceding table. Figures for 1892-1900 will be found at p. 874 of the 1927-28 Year Book.

Calendar Year.	Cash on hand.	Cash due from Banks outside of Canada.	Call and Short Loans elsewhere than in Canada.	Securities.	Percentage of Total Reserves to Net Liabilities.
	p.c.	p.c.	p.c.	p.c.	p.c.
1901	8·0	4·5	10·0	13·5	36·0
1902	7·9	4·4	10·2	13·1	35·6
1903	8·9	4·0	7·7	13·0	33·6
1904	9·4	4·5	7·7	12·1	33·7
1905	9·5	4·9	8·6	11·3	34·3
1906	8·9	3·7	8·7	10·4	31·7
1907	9·5	2·9	7·2	9·7	29·3
1908	11·1	5·5	8·3	9·9	34·8
1909	11·3	5·0	14·2	9·9	40·4
1910	10·7	4·8	11·5	9·5	36·5
1911	11·5	4·8	8·7	9·0	34·0
1912	11·3	4·3	8·9	8·1	32·5
1913	11·1	3·4	8·1	8·5	31·1
1914	12·8	3·9	9·0	8·2	33·9
1915	15·4	5·0	9·2	9·1	38·7
1916	13·7	6·4	10·8	14·2	45·1
1917	11·9	4·0	8·9	21·1	45·9
1918	12·4	2·8	7·8	22·8	45·8
1919	10·9	2·7	6·9	22·2	42·7
1920	9·9	3·1	7·7	14·5	35·2
1921	10·7	3·1	7·2	15·4	36·4
1922	11·3	4·4	8·0	15·0	38·7
1923	10·6	2·8	8·9	18·1	40·4
1924	10·2	3·2	7·9	21·7	43·0
1925	9·6	2·9	9·4	23·6	45·5
1926	8·6	2·8	10·1	21·5	43·0
1927	8·0	2·7	10·3	19·9	40·9
1928	7·5	2·6	9·3	18·1	37·5
1929	7·2	2·9	9·8	16·3	36·3
1930	7·6	3·7	6·8	17·0	35·1
1931	7·5	3·9	4·1	25·7	41·2
1932	8·2	4·4	3·4	28·4	44·4

[1] See Table **15** for actual amounts of reserves and net liabilities.

Subsection 2.—The Individual Chartered Banks of Canada.[1]

During the period from 1881 to 1901, the number of chartered banks doing business in Canada under the Bank Act remained almost the same, 36 in 1881 and 1891, and 34 in 1901, but during the present century there has been in banking, as in industry, an era of amalgamations, the number of banks having dropped to 25 in 1913 and to 10 in December, 1932. That this has been far from involving a curtailment of banking facilities is seen in Table **10**, which shows the development of the banking business since 1867, and in Table **17**, which compares the number of branch banks existing in Canada at different periods, showing a growth from 123 at Confederation to 4,083 inclusive of sub-agencies at Dec. 31, 1930. Since then, owing to the shrinkage in commercial activities as a result of the depression, some unprofitable branches have been closed and the total has declined to 3,772, exclusive of 163 branches and agencies in other countries at Dec. 31, 1932.

Table **18** gives the number of branches of the various banks, by provinces, as at Dec. 31, 1932, while Table **19** contains the statistics of branches of Canadian banks doing business outside of Canada, an extension of Canadian banking (more especially to Newfoundland and the West Indies) which proceeded very rapidly in the War and early post-war period, rising to a total of 206 in 1921. Since then this number has gradually declined to 163 branches and sub-agencies in 1932.

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[1] Revised by Henry T. Ross, Secretary, Canadian Bankers' Association.

17.—Number of Branches of Chartered Banks in Canada, by Provinces, Dec. 31, 1868, 1902, 1905, 1916, 1920, 1926, 1929-32.

Province.	1868.	1902.	1905.	1916.[1]	1920.[1]	1926.[1]	1929.[1]	1930.[1]	1931.[1]	1932[1].
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
P.E.Island	–	9	10	17	41	28	28	28	28	28
Nova Scotia	5	89	101	111	169	134	138	138	138	138
New Brunswick	4	35	49	82	121	101	102	102	101	100
Quebec	12	137	196	784	1,150	1,072	1,169	1,183	1,176	1,131
Ontario	100	349	549	1,154	1,586	1,326	1,396	1,409	1,400	1,351
Manitoba	–	52	95	200	349	224	239	239	222	202
Saskatchewan	–	–	–	413	591	427	462	447	394	361
Alberta	–	30	87	247	424	269	308	304	278	251
British Columbia	2	46	55	187	242	186	223	229	229	206
Yukon	–	–	3	3	3	3	4	4	4	4
Totals	**123**	**747**	**1,145**	**3,198**	**4,676**	**3,770**	**4,069**	**4,083**	**3,970**	**3,772**

[1] Includes sub-agencies for receiving deposits for the banks employing them.

18.—Number of Branches of Individual Canadian Chartered Banks in each Province and in Other Countries as at Dec. 31, 1932.

Note.—This table does not include sub-agencies which numbered 616 in 1932, including 2 in "Other Countries".

Bank.	P.E. Island.	Nova Scotia.	New Bruns-wick.	Quebec.	Ontario.	Manitoba.
	No.	No.	No.	No.	No.	No.
Bank of Montreal	1	14	13	120	216	36
Bank of Nova Scotia	9	36	37	23	134	7
Bank of Toronto	–	–	–	15	104	12
Banque Provinciale du Canada	4	–	13	107	14	–
Canadian Bank of Commerce	7	19	6	67	300	43
Royal Bank of Canada	6	62	22	82	253	72
Dominion Bank	–	–	1	8	99	12
Banque Canadienne Nationale	–	–	–	213	15	8
Imperial Bank of Canada	–	–	–	4	122	8
Barclays Bank (Canada)	–	–	–	1	1	–
Totals	**27**	**131**	**92**	**640**	**1,258**	**198**

Bank.	Saskat-chewan.	Alberta.	British Colum-bia.	Yukon.	Other Count-ries.	Total.
	No.	No.	No.	No.	No.	No.
Bank of Montreal	51	55	52	2	13	573
Bank of Nova Scotia	22	9	6	–	39	322
Bank of Toronto	27	13	9	–	–	180
Banque Provinciale du Canada	–	–	–	–	–	138
Canadian Bank of Commerce	91	67	65	2	15	682
Royal Bank of Canada	118	68	55	–	91	829
Dominion Bank	4	5	4	–	2	135
Banque Canadienne Nationale	7	6	–	–	1	250
Imperial Bank of Canada	39	23	12	–	–	208
Barclays Bank (Canada)	–	–	–	–	–	2
Totals	**359**	**246**	**203**	**4**	**161**	**3,319**

19.—Number of Branches of each of the Canadian Chartered Banks in Other Countries, with their Locations, Dec. 31, 1932.

Bank and Location.	Branches. No.
The Bank of Montreal—	
Newfoundland	5[1]
England	2
France	1
United States	3
Mexico	2
The Bank of Nova Scotia—	
Newfoundland	12
England	1
British West Indies	12[1]
United States	3
Cuba	8
Porto Rico, etc	3
The Canadian Bank of Commerce—	
Newfoundland	2
England	1
British West Indies	3
United States	5
Cuba	1
Mexico	1
The Canadian Bank of Commerce—conc.	
South America	1
St. Pierre and Miquelon	1
The Royal Bank of Canada—	
Newfoundland	5
England	2
British West Indies	11
United States	1
Cuba	29
Porto Rico, etc	12
France (auxiliary)	1
Spain	1
Central and South America	29
The Dominion Bank—	
England	1
United States	1
Banque Canadienne Nationale—	
France	1
Total	**161[2]**

[1] Exclusive of one sub-agency. [2] Exclusive of two sub-agencies.

Earnings of Canadian Banks.—The chartered banks of Canada are for the most part Dominion-wide institutions, doing business in all parts of the country. Their earnings, therefore, reflect with very considerable faithfulness the fluctuations of general business. So far as individual banks are concerned, indeed, the changes resulting from this era of amalgamations are apt to render the figures incomparable over a period of years. During the six years covered by Table **20**, however, the Bank of Montreal, the Royal Bank, the Bank of Nova Scotia, the Bank of Toronto, the Banque Provinciale du Canada, and the Dominion Bank have not been affected by the tendency toward absorptions, and the maintenance of the net profits of these banks is excellent evidence of their sound management and of the resistance of the country to depression.

20.—Net Profits of Canadian Banks and Rates of Dividend Paid, for their business years ended 1927-32.

Bank.	1927.		1928.		1929.	
	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.
	$	p.c	$	p.c.	$	p.c.
Bank of Montreal	5,299,887	12+2	5,847,327	12+2	7,070,892	12+2
Bank of Nova Scotia	2,365,320	16	2,535,519	16	2,761,117	16
Bank of Toronto	1,165,432	12+1	1,264,971	12+1	1,453,436	12+1
Banque Provinciale du Canada	508,608	9	534,248	9	551,022	9
Canadian Bank of Commerce	3,726,910	12+1	3,964,482	12+1	5,066,229	12+1
Royal Bank of Canada	5,370,146	12+2	5,881,254	12+2	7,145,137	12+2
Dominion Bank	1,328,496	12+1	1,408,088	12+1	1,522,809	12+1
Standard Bank of Canada[1]	821,886	12	917,658	12	-	-
Banque Canadienne Nationale	903,201	10	946,065	10	1,053,100	10
Imperial Bank of Canada	1,383,282	12+1	1,459,472	12+1	1,561,562	12+1
Weyburn Security Bank[2]	64,986	7	54,387	7	38,147	7
Barclays Bank (Canada)[3]	-	-	-	-	-	-
Totals, Net Profits	**22,938,154**	-	**24,813,471**	-	**28,223,451**	-

For footnotes see end of table, p. 907.

20.—Net Profit of Canadian Banks and Rates of Dividend Paid, for their business years ended 1927-32—concluded.

Bank.	1930.		1931.		1932.	
	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.
	$	p.c.	$	p.c.	$	p.c.
Bank of Montreal	6,519,031	12+2	5,386,380	12	4,663,100	11
Bank of Nova Scotia	2,535,643	16	2,579,802	16	2,303,434	15
Bank of Toronto	1,339,872	12+1	1,168,915	12	1,044,393	11
Banque Provinciale du Canada	511,457	9	467,440	9	454,659	8¾
Canadian Bank of Commerce	5,378,423	12+1	4,774,923	12	4,279,424	11
Royal Bank of Canada	6,572,627	12+2	5,468,327	12	4,861,849	11
Dominion Bank	1,409,747	12+1	1,322,287	12	1,179,931	11
Standard Bank of Canada[1]	-	-	-	-	-	-
Banque Canadienne Nationale	1,024,702	10	1,001,940	10	972,075	10
Imperial Bank of Canada	1,424,081	12+1	1,328,864	12	1,205,335	11½
Weyburn Security Bank[2]	-	-	-	-	-	-
Barclays Bank (Canada)[3]	-	-	-	-	-	-
Totals, Net Profits	**26,715,583**	-	**23,478,878**	-	**20,964,200**	-

[1] Absorbed by the Canadian Bank of Commerce, Nov. 3, 1928.

[2] Absorbed by Imperial Bank of Canada, May 1, 1931.

[3] This bank, which opened in September, 1929, had reported no profits or dividends up to the end of 1932.

In Tables **21** and **22** will be found statistics showing the positions of the individual chartered banks on Dec. 31, 1932.

21.—Principal and Total Assets of each of the Chartered Banks of Canada, Dec. 31, 1932.

Bank.	Current Gold and Subsidiary Coin.	Dominion Notes.	Deposit in Central Gold Reserves.	United States and other Foreign Currencies.	Due from other Banks.
	$	$	$	$	$
Bank of Montreal	17,847,895	57,412,954	3,000,000	310,459	48,602,348
Bank of Nova Scotia	9,829.480	19,656,293	1,250,000	1,382,316	15,223,669
Bank of Toronto	385,151	7,493,710	630,866	17,461	7,676,757
Banque Provinciale du Canada	232,292	432,992	-	19,165	3,718,999
Canadian Bank of Commerce	10,662,402	24,888,508	8,000,000	596,508	33,043,602
Royal Bank of Canada	12,271,299	26,005,333	3,000,000	15,498,517	74,324,245
Dominion Bank	624,979	11,853,104	400.000	37,825	8,325,472
Banque Canadienne Nationale	945,468	1,203,912	2,000,000	54,864	5,458,779
Imperial Bank of Canada	452,602	4,138,472	1,600,866	23,432	8,537,710
Barclays Bank (Canada)	11,526	96,001	-	744	4,650,603
Totals	**53,263,004**	**153,181,279**	**19,881,732**[3]	**17,941,291**	**209,562,184**

Bank.	Securities.	Loans and Discounts.			Total Assets.[2]
		Call Loans in Canada.	Current Loans in Canada.[1]	Call and Current Loans outside of Canada.	
	$	$	$	$	$
Bank of Montreal	282,666,795	4,093,474	264,865,104	44,689,367	752,033,788
Bank of Nova Scotia	75,188,979	13,057,297	96,682,664	15,838,460	265,084,712
Bank of Toronto	37,397,783	4,730,961	46,085,159	-	109,416,518
Banque Provinciale du Canada	16,828,179	4,694,450	16,870,942	-	46,515,149
Canadian Bank of Commerce	147,929,913	29,442,953	224,965,445	43,425,560	562,552,081
Royal Bank of Canada	121.293,976	27.565,362	258,849,936	137,263,958	726.641,027
Dominion Bank	29,983,261	8,023.517	53,644,901	1,829,899	122,917,038
Banque Canadienne Nationale	35,108,278	5,947,105	73.017,487	105,621	132.751,867
Imperial Bank of Canada	31,307,152	5,635,670	67,533,445	-	127.422,384
Barclays Bank (Canada)	547,699	13,600	1,352,089	-	6,752,349
Totals	**778,252,015**	**103,204,389**	**1,103,867,172**	**243,152,865**	**2,852,086,913**

[1] Includes loans to the Dominion Government, to Provincial Governments and to cities, towns, municipalities and school districts. [2] Includes other assets. [3] $11,081,732 in gold, the remainder being Dominion notes.

22.—Principal and Total Liabilities of each of the Chartered Banks of Canada, Dec. 31, 1932.

Bank.	Capital (paid up).	Rest or Reserve Fund.	Notes in Circulation.	Due to Dominion and to Provincial Governments.	Letters of Credit Outstanding.
	$	$	$	$	$
Bank of Montreal	36,000,000	38,000,000	32,327,903	21,169,173	6,214,105
Bank of Nova Scotia	12,000,000	24,000,000	11,079,008	8,176,901	4,834,757
Bank of Toronto	6,000,000	9,000,000	5,794,424	1,993,597	663,812
Banque Provinciale du Canada	4,000,000	1,500,000	3.528,788	673,443	11,798
Canadian Bank of Commerce	30,000,000	30,000,000	22,811,924	11,291,719	11,011,724
Royal Bank of Canada	35,000,000	35,000,000	28,937,990	16,260,407	17,714,691
Dominion Bank	7,000,000	9,000,000	5,832,230	4,685,977	1,250,393
Banque Canadienne Nationale	7,000,000	7,000,000	8,950,959	3,018,272	244,223
Imperial Bank of Canada	7,000,000	8,000,000	7,555,853	4,350,716	673,591
Barclays Bank (Canada)	500,000	500,000	255,745	420,918	15,776
Totals	**144,500,000**	**162,000,000**	**127,074,824**	**72,041,123**	**42,634,870**

Bank.	Deposits.			Due to other Banks.	Total Liabilities.[1]
	Demand in Canada.	Notice in Canada.	Outside of Canada.		
	$	$	$	$	$
Bank of Montreal	128,369,196	393,332,899	73,615,105	10,428,379	750,233,813
Bank of Nova Scotia	28,230,878	132,355,345	34,366,448	5,149,052	264,335,892
Bank of Toronto	21,306,509	60,625,680	–	1,490,451	108,574.736
Banque Provinciale du Canada	3,907,009	31,358,638	–	31,459	46,118,408
Canadian Bank of Commerce	102,723,479	287,089,114	46,967,202	11,567,094	560,500,330
Royal Bank of Canada	113,717,940	258,243,690	170,536,362	24,125,020	725,074,089
Dominion Bank	28,130,428	61,350,952	1,893,288	1,522,038	122,606,264
Banque Canadienne Nationale	16,767,968	80,054,064	1,346,689	936.423	132,327,159
Imperial Bank of Canada	21,980,688	72,306,113	–	2,775,343	126,234,902
Barclays Bank (Canada)	1,078,672	803,620	–	3,093.195	6,751,930
Totals	**466,212,767**	**1,377,520,115**	**328,725,094**	**61,118,454**	**2,842,757,523**

[1] Includes other liabilities.

Bank Amalgamations and Insolvencies.—Two tables follow which may be of interest to students of Canadian banking history. The first, showing bank insolvencies since 1867, gives the capital paid up, reserves, assets and liabilities of insolvent banks, and shows also the payments to noteholders and depositors. In the majority of cases, both these classes of creditors have received payment in full. The table of bank absorptions gives the dates of absorption of the 36 banks which were incorporated with other institutions from 1867 to 1932.

23.—Bank Insolvencies in Canada since 1867.

Name.	Date of Suspension.	Paid-up Capital.	Reserve Fund.	Liabilities.	Assets.	Paid to—	
						Note-holders.	Depositors.
		$	$	$	$	p.c.	p.c.
Commercial Bank of N.B.	— 1868	600,000	–	671,420	1,222,454	100	100
Bank of Acadia[1]	April, 1873	100,000	–	106,914	213,346	–	–
Metropolitan Bank	Oct. 1876	800,170	–	293,379	779,225	100	100
Mechanics' Bank	May, 1879	194,794	–	547,238	721,155	57½	57½
Bank of Liverpool	Oct., 1879	370,548	–	136,480	207,877	100	$96\frac{6}{17}$
Consolidated Bank of Canada	Aug., 1879	2,080,920	–	1,794,249	3,077,202	100	100
Stadacona Bank	July, 1879	991,890	–	341,500	1,355.675	100	100
Bank of Prince Ed. Island	Nov. 28, 1881	120,000	45,000	1,108,000	953,244	59½	59½

For footnote see end of table, p. 909.

23.—Bank Insolvencies in Canada since 1867—concluded.

Name.	Date of Suspension.	Paid-up Capital.	Reserve Fund.	Liabilities.	Assets.	Paid to—	
						Note-holders.	Depositors.
		$	$	$	$	p.c.	p.c.
Exchange Bank of Canada	Sept., 1883	500,000	300,000	2,868,884	3,779,493	100	66⅜
Maritime Bank of Dom. of Canada	Mar., 1887	321,900	60,000	1,409,482	1,825,993	100	10⅔
Pictou Bank	Sept., 1887	200,000	–	74,364	277,017	100	100
Bank of London in Canada	Aug., 1887	241,101	50,000	1,031,280	1,310,675	100	100
Central Bank of Canada	Nov., 1887	500,000	45,000	2,631,378	3,231,518	100	99⅔
Federal Bank	Jan., 1888	1,250,000	150,000	3,449,499	4,869,113	100	100
Commercial Bank of Manitoba	June 30, 1893	552,650	50,000	1,341,251	1,951,151	100	100
Banque du Peuple	July 15, 1895	1,200,000	600,000	7,761,209	9,533,537	100	75½
Banque Ville-Marie	July 25, 1899	479,620	10,000	1,766,841	2,267,516	100	17⅓
Bank of Yarmouth	Mar. 6, 1905	300,000	35,000	388,660	723,660	100	100
Ontario Bank[3]	Oct. 13, 1906	1,500,000	700,000	15,272,271	15,920,307	100	100
Sovereign Bank of Canada[3]	Jan. 18, 1908	3,000,000	–	16,174,408	19,218,746	100	100
Banque de St. Jean	April 28, 1908	316,386	10,000	560,781	326,118	100	30⅛
Banque de St. Hyacinthe	Jan. 24, 1908	331,235	75,000	1,172,630	1,576,443	100	100
St. Stephen's Bank	Mar. 10, 1910	200,000	55,000	549,830	818,271	100	100
Farmers' Bank	Dec. 19, 1910	567,579	–	1,997,041	2,616,683	100	Nil
Bank of Vancouver	Dec. 14, 1914	445,188	–	912,137	1,532,786	100	[2]
Home Bank of Canada	Aug. 17, 1923	1,960,591	550,000	19,678,747	27,434,709	100	[2]

[1] This bank was only in existence for 3 months and 26 days. Some of its notes were redeemed on its re-opening for a few days. The Dominion Government received 25 cents on the dollar on several thousand dollars worth of the notes which it held. [2] Liquidation incomplete. [3] This bank never suspended payment. The bank which took over its branches assumed all liabilities to depositors. Some years later, for technical purposes, the original bank was put into insolvency.

24.—Bank Absorptions in Canada since 1867.[1]

Purchasing Bank.	Bank Absorbed.	Date.[2]
Bank of Montreal	Exchange Bank, Yarmouth, N.S.	Aug. 13, 1903
	People's Bank of Halifax, N.S.	June 27, 1905
	Ontario Bank	Oct. 13, 1906
	People's Bank of New Brunswick	April 15, 1907
	Bank of British North America	Oct. 12, 1918
	Merchants' Bank of Canada	Mar. 20, 1922
	Molson's Bank	Jan. 20, 1925
Canadian Bank of Commerce	Gore Bank	May 19, 1870
	Bank of British Columbia	Dec. 31, 1900
	Halifax Banking Co.	May 30, 1903
	Merchants' Bank of P.E.I.	May 31, 1906
	Eastern Townships' Bank	Feb. 29, 1912
	Bank of Hamilton	Dec. 31, 1923
	Standard Bank of Canada	Nov. 3, 1928
Bank of Nova Scotia	Union Bank of P.E.I.	Oct. 1, 1883
	Bank of New Brunswick	Feb. 15, 1913
	The Metropolitan Bank	Nov. 14, 1914
	The Bank of Ottawa	April 30, 1919
Royal Bank of Canada	Union Bank of Halifax	Nov. 1, 1910
	Traders' Bank of Canada	Sept. 3, 1912
	Quebec Bank	Jan. 2, 1917
	Northern Crown Bank	July 2, 1918
	Union Bank of Canada	Aug. 31, 1925
Imperial Bank of Canada	Niagara District Bank	June 21, 1875
	The Weyburn Security Bank	May 1, 1931
Banque d'Hochelaga[3]	Banque Nationale	April 30, 1924
Bank of New Brunswick	Summerside Bank	Sept. 12, 1901
Merchants' Bank of Canada	Merchants' Bank	Feb. 22, 1868
	Commercial Bank of Canada	June 1, 1868
Union Bank of Halifax	Commercial Bank of Windsor	Oct. 31, 1902
Northern Crown Bank	The Northern Bank	July 2, 1908
	Crown Bank of Canada	July 2, 1908
Union Bank of Canada	United Empire Bank	Mar. 31, 1911
Home Bank of Canada	La Banque Internationale du Canada	April 15, 1913
Standard Bank of Canada	Western Bank of Canada	Feb. 13, 1909
	Sterling Bank of Canada	Dec. 31, 1924

[1] The purchasing banks named in the latter part of the table are no longer in business.

[2] Dates given since 1900 are those of the Orders in Council authorizing the absorptions.

[3] The Banque d'Hochelaga after absorbing the Bank Nationale adopted the name Banque Canadienne Nationale.

Subsection 3.—The Volume of Business Transacted through the Banks.

In advanced industrial societies money is only "the small change of commerce". The great bulk of monetary transfers, particularly in the case of the larger transactions, is made through the banks. Thus it has been estimated that in the United States in 1917 about 6 p.c. of the business transactions of the country were financed by the use of money and the remaining 94 p.c. by the use of cheques. Accordingly, if we knew the aggregate amount of the cheques paid through the banks and charged to accounts, we should have an almost complete record of the volume of business transacted, and thus of the business activity of the country.

Statistics of this character were at first secured through the operation of the clearing houses—places where the representatives of all the banks met daily in the leading cities and presented for payment the notes of other banks and the cheques drawn upon other banks that had been paid into their institutions in the regular course of business. In Canada, the first clearing houses to be established were those of Halifax (1887), Montreal (1889), Toronto (1891), Hamilton (1891) and Winnipeg (1893), and the number has subsequently increased to 32. In recent years, owing to the reduction in the number of the banks through amalgamations, the proportion of the inter-bank transactions recorded by the clearing houses to the grand total of banking transactions has declined, and the place of total bank clearings as a measure of business has been taken by total bank debits—*i.e.*, the totals of cheques charged to accounts at all banks. The total bank debits at all branch banks situated in the clearing-house cities of Canada have been compiled for 1924 and subsequent years by the Canadian Bankers' Association for the Dominion Bureau of Statistics, which has published the figures monthly and annually with interpretative analyses. Further, in order that an estimate might be made of the proportion of banking transactions outside the clearing-house cities to the total, the Canadian Bankers' Association secured for the month of January, 1929, the grand total of all cheques charged to accounts at all branch banks throughout the Dominion. The results were published in the Bureau's Monthly Review of Bank Debits for February, 1929, and showed that the aggregate of transactions outside the clearing-house cities was in January, 1929, 14½ p.c. of the grand total in the clearing-house cities. The corresponding figures in the five economic areas were as follows: Maritime Provinces 90·6 p.c., Quebec 6·1 p.c., Ontario 17·2 p.c., Prairie Provinces 18·6 p.c., British Columbia 14·3 p.c. Only in the Maritime Provinces does the total of bank debits in clearing-house cities appear to inadequately represent the grand total of business transactions throughout the whole area.

Clearing-House Transactions.[1]—The following table shows for the years 1928-32 the total volume of clearings in the clearing houses of Canada. These figures, it may be added, represent not only actual city clearings but exchanges between numerous rural branches of the banks in each district.

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[1] The following is a description of the operation of the Central Clearing Fund: Since the beginning of January, 1927, balances due to, or by each member of, the Montreal, Toronto, Winnipeg and Vancouver clearing houses, after they have been settled and declared by the clearing-house manager, are communicated daily (in the case of the three latter clearing houses by telegraph) to a trustee--The Royal Trust Company—in Montreal. Each bank maintains an account with the trustee to the credit of which Dominion notes are deposited. The trustee, on receipt of the daily advice, makes the appropriate credit or debit entry in each account. In the usual course the trustee has made the entries and balanced the accounts for the day by 12 o'clock noon. Each clearing bank is immediately notified of the state of its account; should the debits of the day on balance exceed the amount of Dominion notes in the possession of the trustee, the bank concerned must deliver, within an hour of notification, an amount of Dominion notes sufficient to give it a credit balance. Inasmuch as the four cities mentioned are the settlement points for the clearing-houses in their respective zones, practically the whole of the banking transactions of the country are adjusted daily in Montreal in the accounts kept by the trustee.

25.—Amount of Exchanges of the Clearing Houses of Chartered Banks in Canada for the calendar years 1928-32.

Clearing House.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Brandon	38,724,824	35,403,096	26,763,171	21,015,599	17,459,229
Brantford	72,529,308	76,801,737	58,564,628	48,891,417	39,446,268
Calgary	666,517,374	697,716,733	451,673,700	319,987,617	258,257,381
Chatham	43,568,049	41,712,000	32,815,670	27,388,592	22,190,250
Edmonton	351,325,045	358,961,724	293,550,893	237,843,012	194,356,935
Fort William	59,588,926	54,159,627	43,543,156	34,553,840	28,973,198
Halifax	185,678,418	197,539,723	174,720,962	150,986,615	114,384,527
Hamilton	337,852,407	350,828,242	310,976,401	247,414,617	190,818,400
Kingston	46,174,085	46,688,914	44,029,362	35,357,257	28,834,227
Kitchener	66,254,228	71,569,948	63,410,494	52,182,195	43,540,055
Lethbridge	40,774,009	38,164,110	29,064,557	20,849,308	17,287,271
London	180,871,281	183,917,716	168,047,076	145,511,234	127,365,483
Medicine Hat	26,616,621	26,445,424	17,303,187	12,319,717	9,648,413
Moncton	49,385,815	53,623,924	51,039,289	38,911,582	35,040,759
Montreal	8,072,843,473	8,279,414,820	6,917,957,798	5,773,473,678	3,971,576,104
Moose Jaw	73,000,603	72,493,575	59,359,874	37,751,168	27,706,507
New Westminster	44,775,067	50,789,127	43,641,522	30,103,730	23,366,543
Ottawa	431,183,370	443,895,304	372,586,750	323,349,845	227,999,793
Peterborough	48,837,555	51,283,226	47,113,834	38,026,819	30,253,664
Prince Albert	25,131,852	27,389,869	22,887,338	19,749,381	14,143,193
Quebec	361,754,089	375,097,842	339,596,344	285,294,714	210,822,180
Regina	312,089,797	337,388,121	252,351,215	192,876,885	176,858,737
Saint John	150,715,381	152,472,005	124,224,187	115,510,903	85,895,057
Sarnia	37,865,490	45,109,018	36,465,041	25,489,715	19,670,808
Saskatoon	138,687,497	146,354,851	117,775,186	89,784,777	73,353,023
Sherbrooke	50,673,178	54,664,846	45,958,551	37,092,630	29,246,459
Sudbury	-	27,208,321	57,927,754	36,319,007	24,215,334
Toronto	7,674,864,018	7,721,761,164	6,036,838,536	5,134,895,419	4,071,710,500
Vancouver	1,109,375,640	1,243,625,052	994,131,725	795,227,626	637,132,962
Victoria	134,095,845	151,226,015	125,397,653	95,261,092	70,673,038
Windsor	280,032,888	298,142,566	214,689,007	150,917,406	117,006,345
Winnipeg	3,443,151.986	3,393,339,677	2,517,469,597	2,253,265,522	1,974,922.067
Totals	**24,554,938,119**	**25,105,188,317**	**20,091,874,458**	**16,827,692,919**	**12,914,154,710**

Bank clearings, though generally regarded as a leading barometer of business conditions, are defective in that they record only inter-bank transactions—transactions through which one bank becomes either the debtor or the creditor of another. They do not record the numerous transactions in which the transfer of value is made within a single bank, as, for example, where the purchaser and the seller of values that are paid for by cheque carry their accounts in the same bank. As the number of separate banks has in recent years been steadily diminishing through amalgamations, there being only 10 in December, 1932, as compared with 18 in 1923, inter-bank transactions are bearing a steadily decreasing proportion to the total of business transacted, a fact which goes far to explain the relative smallness of the increase in bank clearings from 1926 to 1929 and makes the extent of the subsequent decrease, as shown in Table **25**, open to question.

Bank Debits.—Since bank clearings have ceased to be a satisfactory measure of general business, the Bureau of Statistics in 1923 took up with the Canadian Bankers' Association the question of securing a record of bank debits, *i.e.*, of all cheques charged against accounts at all banks. The Bankers' Association agreed to secure from January, 1924, the monthly aggregate figures of the amount of cheques charged to accounts at all banking offices situated in the clearing-house cities of Canada, and the figures of cheques charged to accounts (bank debits) are given for the years 1928-32 in Table **26**. The Weyburn Security Bank, which operated in southern Saskatchewan, voluntarily added a total of all cheques charged to accounts at all of its branches.

It will be noted, as establishing the need of the newer record, that bank debits for 1932 decreased 40·6 p.c. as compared with those of 1928, while bank clearings in the later year show a decrease of 47·4 p.c. The bank debits are a comparable record for the five years; the bank clearings, owing to the reduction in the number of banks, are not a comparable record.

26.—Bank Debits at the Clearing-House Cities of Canada, by Individual Cities, calendar years, 1928-32.

Clearing-House Centre.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$
Maritime Provinces—					
Halifax	404,665.405	425,487,760	361,736,685	330,371,553	257,989.295
Moncton	91,313,729	99.597,577	101,018,427	87,229,007	73.548,793
Saint John	249,488,661	272,872,476	245,595,665	234,942,909	187,632,726
Totals	745,467,795	797,957.813	708,350,777	652,543,469	519,170.814
Quebec—					
Montreal	13,962,318,025	15,558,093,739	12,271,206,394	9,756,753,765	7,135,517,032
Quebec	794,833,137	788,145,269	744,930,005	701,258,405	560.686,426
Sherbrooke	155,506,587	137,428,244	120,921,940	92.060,809	69,997,106
Totals	14,912,657,749	16,483,667,252	13,137,058,339	10,550,072.979	7,766,200,504
Ontario—					
Brantford	143,943.039	166,590,813	126,813,356	106.212,582	85,438,727
Chatham	101,383,642	122,271,304	95,460,287	81,403,262	71.625,208
Fort William	108,176.187	102,154,515	78,028,739	66,540,124	55.335,694
Hamilton	814,420,963	909,896,874	831,837,930	649,599,942	526.940,741
Kingston	79,595,640	83,879,278	79,797,075	64,828,365	55,085,899
Kitchener	142,995,237	159.265.585	139,515,780	116,857,177	96,266,553
London	404,700,773	424,805,150	408,176,670	365,324,602	315,954.273
Ottawa	2,089,409,008	2,001,694,411	1,904,804,194	1,869.730,944	1,579,527,632
Peterborough	92,760,882	93,245,286	84,634,613	70,964,205	55,426,709
Sarnia	120,923,729	146,820,023	124,524,399	104,000,535	95,058,795
Sudbury	–	34,116,876	87,109,599	58,832,961	40,328,991
Toronto	12,673,220,316	13,714,209,353	10,654,982,452	9,512,342,450	8,066,207,006
Windsor	541,319,833	594,318,762	428,655,192	310,203.205	215.676,051
Totals	17.312,849,249	18,543,268,230	15,044,340,286	13,376,840,354	11,258,872,279
Prairie Provinces—					
Brandon	61,324,007	62,315,237	50,605,166	39,802,614	33,569.832
Calgary	1,096,733,543	1.253,618,912	898,426,300	647,871,720	513,557,662
Edmonton	546,841,716	603,871,484	570,301,889	489,783,798	393,433,460
Lethbridge	89,863,419	97,220.371	73,734,543	49,736,330	37,067,143
Medicine Hat	56,953,944	54,258,545	37,887,826	26,122,436	21,077,192
Moose Jaw	119,937,245	128,436,189	112,897,357	79,343,948	61,064,586
Prince Albert	35,799,271	39,150,683	32,683,118	29,802,029	21,124,445
Regina	552,941,674	630,264,345	570,766,671	412,701,024	462,876,073
Saskatoon	203,264,797	224,155,812	194,543,418	143,056,796	114,981,799
Winnipeg	5,187,680,266	4,788,952,527	3,712,135,033	3,279,817,622	3,138,453,543
Branches of the Weyburn Security Bank	55,372,926	40,562,191	25,099,552	3,173,413[1]	–
Totals	8,006,712,808	7,922,806,296	6,279,080,873	5,201,211,730	4,797,205,735
British Columbia—					
New Westminster	92,705,331	105,357,294	93,831,458	67,987,301	51,107,251
Vancouver	1,984,485,771	2,365,678,383	1,812,724,948	1,416,428,661	1.190,466,183
Victoria	422,080,397	451,746,570	415,915,085	321,383,768	261,265,467
Totals	2,499,271,499	2,922,782,247	2.322,471,491	1,805,799,730	1,502,838,901
Grand Totals	**43,476,959,100**	**46,670,481,838**	**37,491,301,766**	**31,586,468,262**	**25,844,288,293**

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[1] Three months only, the Weyburn Security Bank having been absorbed by the Imperial Bank of Canada as of May 1, 1931.

Subsection 4.—Government and other Savings Banks.

In a comparatively new country where capital is relatively scarce, it is a natural thing that the banks which finance the business institutions should also absorb the bulk of the people's savings for use in promoting the business of the country. Thus in Canada the great bulk of the current savings of the people is found in the savings or notice deposits of the Canadian chartered banks, the annual average figures of which are given for recent years in Table **10** of this chapter, the 1932 average being

$1,376,325,128. Further, the current savings of the Canadian people are going very largely into the purchase of life insurance, the total premiums paid in the single year 1931 aggregating $220,523,727. In comparison with the enormous figures of notice deposits in chartered banks and with total insurance in force, the deposits in the special savings banks are comparatively small, but are none the less significant.

There are three distinct types of savings banks in Canada at the present time, in addition to the savings departments of the chartered banks and of trust and loan companies. First, there is the Post Office Savings Bank, the deposits in which are a direct obligation of the Dominion Government. Secondly, there are Provincial Government savings banking institutions in Ontario and in Alberta, where the depositor becomes a direct creditor of the province. Thirdly, there are in the province of Quebec two important savings banks, the Montreal City and District Savings Bank and the Caisse d'Economie de Notre-Dame de Québec, established under Dominion legislation and making monthly reports to the Department of Finance.

Dominion Government Savings Banks.—Prior to 1929 there were two classes of Dominion Government savings banks in Canada, the Post Office Savings Bank, under the Post Office Department, and the Dominion Government Savings Bank, attached to the Department of Finance. The former was established under the Post Office Act of 1867 (31 Vict., c. 10) in order "to enlarge the facilities now available for the deposit of small savings, to make the Post Office available for that purpose, and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him together with the interest due thereon". Branches of the Government Savings Bank proper, under the authority of the Finance Department, were established in the leading cities of Canada under the management of the Assistant Receivers-General and in other places, in the provinces of Nova Scotia and New Brunswick, under managers appointed by the Governor in Council. The Government Savings Bank was amalgamated with the Post Office Savings Bank in 1929. Historical statistics for both systems will be found in Table **27** and more detailed figures covering the last six years in Table **28**.

27.—Deposits with Dominion Government Savings Banks,[1] June 30, 1868-1906, and Mar. 31, 1907-32.

NOTE.—Figures for all intermediate years will be found on p. 833 of the 1926 Year Book.

Fiscal Year.	Postal Savings Bank.	Dominion Government Savings Bank.	Fiscal Year.	Postal Savings Bank.	Dominion Government Savings Bank.
	$	$		$	$
1868	204,589	1,483,219	1915	39,995,406	14,006,158
1870	1,588,849	1,822,570	1916	40,008,418	13,519,855
1875	2,926,090	4,245,091	1917	42,582,479	13,633,610
1880	3,945,669	7,107,287	1918	41,283,479	12,177,283
1885	15,090,540	17,888,536	1919	41,654,960	11,402,098
1890	21,990,653	19,021,812	1920	31,605,594	10,729,218
1895	26,805,542	17,644,956	1921	29,010,619	10,150,189
1900	37,507,456	15,642,267	1922	24,837,181	9,829,653
1905	45,368,321	16,649,136	1923	22,357,268	9,433,839
1906	45,736,488	16,174,134	1924	25,156,449	9,055,091
1907	47,453,228	15,088,584	1925	24,662,060	8,949,073
1908	47,564,284	15,016,871	1926	24,035,669	8,794,870
1909	45,190,484	14,748,436	1927	23,402,337	8,519,706
1910	43,586,357	14,677,872	1928	23,463,210	7,640,566
1911	43,330,579	14,673,752	1929	28,375,770	[2]
1912	43,563,764	14,655,564	1930	26,086,036	[2]
1913	42,728,942	14,411,541	1931	24,750,227	[2]
1914	41,591,286	13,976,162	1932	23,919,677	[2]

[1] Do not include Provincial Government savings banks. [2] Included in Post Office Savings Bank.

28.—Total Combined Financial Business of Post Office and Dominion Government Savings Banks, Mar. 31, 1927-32.

Item.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Deposits during year	4,117,623	4,084,555	2,910,147	2,746,050	2,535,563	3,582,988
Interest on deposits	928,822	908,608	842,025	784,582	732,733	706,270
Total cash and interest	5,046,445	4,993,163	3,752,172	3,530,632	3,268,296	4,289,258
Withdrawals	5,959,275	6,449,036	4,519,507	5.820,366	4,604,105	5,119,808
At credit of depositors	31,922,281	31 104,015	28,375,770	26,086,036	24,750,227	23,919,677

Provincial Government Savings Banks.—Institutions for the deposit of savings are operated by the Provincial Governments of Ontario and Alberta, while a similar institution was in operation in Manitoba from 1924 to 1932 when the depositors' accounts were taken over by the chartered banks.

Ontario.—In the session of 1921, the Legislature of Ontario authorized the establishment of the Province of Ontario Savings Office, and in March, 1922, the first branches were opened. The funds received from this source are used almost exclusively to finance farm loans under the Agricultural Development Act. Interest at the rate of 3 p.c. per annum compounded half yearly is paid on all accounts. The deposits are all repayable on demand. Total deposits on Oct. 31, 1932, were $23,709,820 and the number of depositors at that date was over 90,000. Seventeen branches are in operation throughout the province.

Alberta.—In Alberta the Provincial Treasury receives savings deposits and issues demand savings certificates bearing interest at 4 p.c., or term certificates for one, two or three years, in denominations of $25 and upwards, bearing interest at 5 p.c. The total amount in savings certificates on Sept. 30, 1932, was $8,579,917, made up of $8,029,651 in demand certificates and $550,266 in term certificates.

Other Savings Banks.—The Montreal City and District Savings Bank, founded in 1846 and now operating under a charter of 1871, had on Dec. 31, 1932, a paid-up capital of $2,000,000, savings deposits of $54,311,409, and total liabilities of $56,307,239. Total assets amounted to $60,907,618 including over $44,000,000 of Dominion, provincial and municipal securities. The Caisse d'Economie de Notre-Dame de Québec, founded in 1848 under the auspices of the St. Vincent de Paul Society, incorporated by Act of the Canadian Legislature in 1855 and given a Dominion charter by 34 Victoria, c. 7, had on Dec. 31, 1932, savings deposits of $12,399,452, a paid-up capital of $1,000,000 and total assets of $16,207,494.

The co-operative people's banks of Quebec (174 reported to the Provincial Government in 1931) are also an important element in promoting thrift and assisting business in that province. Thus on Dec. 31, 1931, savings deposits in these banks amounted to $7,436,861, while the amount on loan was $9,762,339. Loans granted in 1931 numbered 16,203 amounting to $2,998,046. Profits realized amounted to $594,235.

29.—Deposits in the Montreal City and District Bank and the Caisse d'Economie de Notre-Dame de Québec, as at June 30, 1868-1906, and Mar. 31, 1907-32.

Note.—Figures for all intermediate years will be found on p. 833 of the 1926 Year Book.

At End of Fiscal Year.	Deposits.	At End of Fiscal Year.	Deposits.	At End of Fiscal Year.	Deposits.
	$		$		$
1868	3,369,799	1909	29,867,973	1921	58,576,775
1870	5,369,103	1910	32,239,620	1922	58,292,920
1875	6,611,416	1911	34,770,386	1923	59,327,961
1880	6,681,025	1912	39,526,755	1924	64,245,811
1885	9,191,895	1913	40,133,351	1925	65,837,254
1890	10,908,987	1914	39,110,439	1926	67,241,344
1895	13,128,483	1915	37,817,474	1927	69,940,351
1900	17,425.472	1916	40,405,037	1928	72,695,422
1905	25.050,966	1917	44,139,978	1929	70,809,603
1906	27,399,194	1918	42,000.543	1930	68,846,366
1907	28,359,618	1919	46,799,877	1931	69.820,422
1908	28,927,248	1920	53,118,053	1932	68,683.324

Section 3.—Loan and Trust Companies.

Business such as that now transacted by loan and trust companies was first carried on by an incorporated Canadian company in 1844, when the Lambton Loan and Investment Co. was established, while the Montreal Building Society was incorporated by c. 94 of the Statutes of 1845. In order to legalize and encourage such operations in Upper Canada, an Act was passed by the Canadian Legislature in 1846, followed in 1847 and 1849 by Acts in New Brunswick and Nova Scotia respectively. These early companies were termed building societies; their activities comprised mainly the lending of money on the security of real estate and also the lending of money to members without their being liable to the contingency of losses or profits in the business of the society. In addition to these operations, such companies were authorized by an Act of 1859 to "borrow money to a limited extent". Later, by the Building Societies Act of 1874, authority was given to receive money on deposit and to issue debentures, subject to certain restrictions as to amounts of deposits.

The number of loan and savings societies in operation and making returns to the Government at Confederation was 19, with an aggregate paid-up capital of $2,110,403 and deposits of $577,299. Rapid increases in the number of companies and total volume of business resulted from subsequent legislation until in 1899 102 companies (including trust companies) made returns, showing capital stock paid up of $47,337,544, reserve funds of $9,923,728 and deposits of $19,466,676; total liabilities had increased from $3,233,985 to $148,143,496 between 1867 and 1899. By 1913 the number of companies had declined, through amalgamations and absorptions, to 74 (including 16 trust companies) with a combined paid-up capital of $68,091,042, reserves of $35,959,342, deposits of $32,681,806 and total liabilities of $478,658,228.

The laws relating to trust and loan companies were revised by the Loan and Trust Companies Acts of 1914 (4-5 Geo. V, cc. 40 and 55), with the results that the statistics of provincially incorporated loan and trust companies ceased to be collected. The statistics of Tables **31** and **32** refer only to those companies operating under Dominion charter, except that beginning in 1926 the statistics of loan companies and trust companies incorporated by the province of Nova Scotia, and brought by the laws of that province under the examination of the Dominion Department of Insurance, have been included. Also, since 1922 provincially incorporated loan and trust companies make voluntary returns of their principal statistics to the Dominion Department of Insurance, so that all-Canadian totals are again available for recent years. As indicating the progress of the aggregate of loan company business in Canada, it may be stated that the book value of the assets of all loan companies rose from $188,637,298 in 1922 to $213,649,794 in 1931. The total assets in the hands of the trust companies increased from $805,689,070 in 1922 to $2,410,991,525 in 1931. The latter figure included $2,177,646,644 of "estates, trusts and agency funds". (Table **30**.)

Functions of Loan Companies.—The principal function of loan companies is the lending of funds on first mortgage security, the money thus made available for development purposes being secured mainly by the sale of debentures to the investing public and by savings department deposits. Of the loan companies operating under provincial charters, the majority conduct loan, savings and mortgage business, generally in the more prosperous farming communities.

Functions of Trust Companies.—Trust companies act as executors, trustees and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys in the management of the estates of the living, as guardians of minor or incapable persons, as financial agents for municipalities and companies, and, where so appointed, as authorized trustees in bankruptcy. Some companies receive deposits, but the lending of actual trust funds is restricted by law. The figures of Table **30** are of particular interest in the case of trust companies, which, on account of the nature of their functions, are mainly provincial institutions, since their chief duties are intimately connected with the matter of probate, which lies within the sole jurisdiction of the provinces.

30.—Summary Statistics of the Operations of Dominion and Provincial Loan and Trust Companies in Canada, 1931.

LOAN COMPANIES.

Item.	Provincial Companies.	Dominion Companies.	Total.
	$	$	$
Book value of assets	65,728,238	147,921,556	213,649,794
Liabilities to the public	31,586,796	110,779,994	142,366,790
Capital Stock—			
Authorized	43,394,400	65,150,000	108,544,400
Subscribed	19,950,421	28,743,300	48,693,721
Paid up	17,879,937	20,680,307	38,560,244
Reserve and contingency funds	13,041,719	14,753,181	27,794,900
Other liabilities to shareholders	3,879,535	645,111	4,524,646
Total liabilities to shareholders	34,801,191	36,078,599	70,879,790
Net profit realized during year	1,462,974	2,098,299	3,561,273

TRUST COMPANIES.

Assets—			
Company funds	66,338,148	15,459,347	81,797,495
Guaranteed funds	125,829,165	25,718,221	151,547,386
Estates, trusts and agency funds	1,961,948,175	215,698,469	2,177,646,644
Totals	2,154,115,488	256,876,037	2,410,991,525
Capital Stock—			
Authorized	72,650,000	22,650,000	95,300,000
Subscribed	31,830,376	11,884,240	43,714,616
Paid up	28,377,831	10,493,609	38,871,440
Reserve and contingency funds	20,865,045	3,478,889	24,343,934
Unappropriated surplus	2,423,680	522,015	2,945,695
Net profit realized during year	3,742,826	592,177	4,335,003

31.—Liabilities and Assets of Loan Companies Chartered by the Dominion Government, 1914-31.

LIABILITIES.

Dec. 31—	Liabilities to Shareholders.			Liabilities to the Public.				
	Capital Paid Up.	Reserve Funds.	Total.[1]	Debentures and Debenture Stock.		Deposits.	Interest Due and Accrued.	Total.[2]
				Canada.	Elsewhere and Sundries.			
	$	$	$	$	$	$	$	$
1914	19,238,512	9,374,363	29,375,689	6,688,124	26,101,702	8,104,072	318,504	41,212,402
1915	19,401,856	9,878,266	30,155,708	6,764,836	25,538,301	9,193,194	340,627	41,836,958
1916	19,673,934	10,319,176	29,993,110	6,889,946	24,653,657	8,987,720	347,864	40,879,187
1917	19,813,217	10,705,215	30,518,432	7,075,081	22,430,846	8,934,825	351,420	38,792,172
1918	19,945,858	10,938,193	30,884,051	7,442,982	23,501,565	7,802,539	364,087	39,111,173
1919	20,191,612	11,923,234	32,114,846	–	–	9,347,096	–	42,405,175
1920	24,062,521	13,442,364	39,110,640	16,982,032	18,451,054	15,257,840	–	51,302,620
1921	25,750,966	14,278,619	40,629,689	17,682,083	20,265,766	15,868,926	480,547	54,651,433
1922	25,241,600	14,740,834	40,013,363	20,360,480	22,390,990	16,910,558	499,661	60,386,903
1923	24,939,622	14,879,516	41,239,712	22,667,861	24,315,010	15,854,029	577,460	63,600,093
1924	22,592,057	13,734,681	37,122,138	25,426,434	21,901,431	15,970,077	543,131	63,989,554
1925[5]	23,632,474	14,555,603	38,461,375	30,052,139	21,600,001	18,660,122	538,755	71,066,398
1926[5]	23,498,336	14,861,280	38,977,937	36,613,088	21,572,810	21,316,150	663,987	80,447,480
1927[5]	20,699,710	14,867,432	38,596,121	47,818,386	19,965,321	27,019,323	868,694	95,895,897
1928[5]	20,139,831	14,113,871	36,179,771	51,269,133	15,292,362	30,671,257	940,528	98,453,583
1929[5]	20,292,840	14,438,022	35,806,640	52,857,277	14,813,287	29,602,789	942,178	98,847,526
1930[5]	20,475,116	14,632,128	35,799,585	58,058,682	15,063,313	31,581,913	978,891	106,378,655
1931[5]	20,680,307	14,753,181	36,078,600	63,158,214	14,837,565	30,823,662	1,027,677	110,779,994

ASSETS.

Dec. 31—	Real Estate.[3]	Mortgages on Real Estate.	Collateral Loans.	Bonds, Debentures, Stocks and other Company Property.	Cash on hand and in Banks.	Interest, Rents, etc., Due and Accrued.	Total.[4]
	$	$	$	$	$	$	$
1914	1,763,892	53,710,084	–	11,301,869	3,220,803	591,443	70,588,091
1915	1,779,030	52,807,357	–	12,793,309	3,933,004	679,966	71,992,666
1916	1,485,267	51,981,926	–	13,482,805	3,241,053	681,246	70,872,297
1917	1,577,576	49,712,872	–	14,156,080	3,478,220	751,475	69,676,223
1918	1,512,520	48,293,988	–	16,640,017	3,023,839	524,664	69,995,028
1919	–	–	–	–	2,838,636	261,810	74,520,021
1920	4,753,049	63,725,084	1,750,128	16,593,932	3,363,877	1,658	90,413,261
1921	4,979,779	67,147,513	1,618,865	15,328,797	4,568,984	2,790,348	96,698,810
1922	5,309,854	69,824,985	1,916,976	16,967,305	4,800,649	2,989,460	102,462,090
1923	5,515,170	73,858,726	1,772,148	16,445,635	3,467,822	3,353,822	104,866,102
1924	4,035,532	71,468,506	1,722,803	18,568,856	3,636,592	2,470,756	101,919,837
1925[5]	3,982,921	79,106,407	1,532,366	20,210,387	3,442,928	2,180,700	110,638,667
1926[5]	4,150,307	89,873,578	1,161,886	18,426,169	4,284,648	2,274,535	120,321,095
1927[5]	3,999,808	102,501,193	1,585,891	18,884,434	5,672,479	2,020,087	134,669,734
1928[5]	4,172,704	105,121,365	2,610,947	17,874,808	3,258,762	1,746,138	134,793,527
1929[5]	6,156,227	103,806,670	2,700,720	17,654,463	3,195,801	1,834,297	135,358,095
1930[5]	7,069,914	105,503,098	3,019,202	20,834,907	4,313,669	2,559,065	143,308,774
1931[5]	8,112,501	106,628,854	1,797,490	23,430,382	3,295,037	3,529,451	147,921,556

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[1] Includes other liabilities to shareholders. [2] Includes other liabilities to the public. [3] Book value of real estate for companies' use and other real estate. [4] Includes other assets. [5] Includes statistics of loan companies chartered by the Government of Nova Scotia but inspected by the Dominion Department of Insurance.

32.—Liabilities and Assets of Trust Companies Chartered by the Dominion Government, 1914-31.

COMPANY FUNDS—LIABILITIES.

Dec. 31—	To Shareholders.				To the Public.	Total.
	Capital Paid up.	Reserve Funds.	Other Liabilities.	Total.	Taxes, Borrowed Money, etc.	
	$	$	$	$	$	$
1914	6,051,146	2,541,413	202,427	8,794,986	1,948,414	10,743,400
1915	5,307,128	1,159,479	233,738	6,700,345	606,005	7,306,350
1916	5,673,670	1,245,589	287,214	7,206,473	620,470	7,826,943
1917	5,297,130	1,275,789	352,153	6,925,072	731,220	7,656,292
1918	6,266,203	1,477,617	415,938	8,159,758	676,379	8,836,137
1919	7,356,474	1,643,464	391,625	9,391,563	616,378	10,007,941
1920	7,465,376	1,908,753	391,975	9,766,104	561,265	10,327,369
1921	7,532,777	1,746,579	167,303	9,446,659	499,264	9,945,923
1922	7,678,401	1,912,123	46,068	9,636,592	329,827	9,966,419
1923	7,772,749	1,908,887	5,674	9,687,310	832,724	10,520,034
1924	8,796,479	1,918,567	169,390	10,884,436	766,783	11,651,219
1925[1]	9,523,618	2,261,890	184,153	11,969,661	232,813	12,202,474
1926[1]	9,666,449	2,313,464	393,932	12,373,845	580,380	12,954,225
1927[1]	9,824,031	2,653,673	443,377	12,921,081	571,279	13,492,360
1928[1]	10,424,249	2,877,766	549,905	13,851,920	741,364	14,593,284
1929[1]	10,512,879	3,325,020	257,288	14,095,187	325,914	14,421,101
1930[1]	10,260,025	3,431,538	718,240	14,409,803	294,897	14,704,700
1931[1]	10,493,608	3,478,889	629,215	14,601,712	464,719	15,066,431

COMPANY FUNDS—ASSETS.

Dec. 31—	Loans.			Real Estate.	Government, Municipal and School Securities Owned.	Stocks.	Cash on hand and in Banks.	All other Assets belonging to the Companies.	Total Assets of the Companies.
	On Real Estate, First Liens.	On Real Estate, Second Liens.	On Stocks and Securities.						
	$	$	$	$	$	$	$	$	$
1914	5,189,797	113,095	557,625	-	787,400	-	179,928	3,033,756	9,861,601
1915	3,972,520	102,395	647,524	-	876,760	-	172,448	1,529,522	7,301,169
1916	3,906,986	544,747	374,392	-	1,116,110	-	266,964	1,585,513	7,794,71
1917	3,993,484	297,387	253,781	-	1,145,815	-	173,130	1,789,364	7,652,967
1918	3,933,962	101,784	294,472	-	1,829,000	-	724,689	1,936,365	8,830,27
1919	4,432,455	557,171	496,769	-	2,170,618	-	706,763	1,635,773	9,999,549
1920	4,736,064	-	512,800	701,564	2,500,942	349,294	576,125	847,463	10,224,25
1921	4,408,914	-	344,302	908,618	2,400,914	253,779	603,618	1,317,785	10,237,93
1922	5,254,434	-	391,475	973,022	1,584,234	264,186	473,687	1,412,205	10,353,24
1923	5,402,752	-	375,129	1,048,682	1,656,304	292,564	481,672	1,573,406	10,830,50
1924	5,114,753	-	446,001	1,551,673	1,598,971	336,818	524,368	2,483,675	12,056,25
1925[1]	5,143,123	-	618,250	1,969,737	2,323,064	432,956	203,431	1,763,355	12,453,91
1926[1]	5,450,907	-	580,128	2,091,322	2,318,344	477,917	705,064	1,571,595	13,195,277
1927[1]	5,668,574	-	977,514	2,140,344	1,993,823	494,083	804,469	1,603,906	13,682,713
1928[1]	5,651,201	-	1,156,698	2,148,354	2,808,630	495,094	917,019	1,589,288	14,766,284
1929[1]	5,652,084	-	1,121,536	1,959,581	3,228,722	425,077	659,466	1,623,031	14,669,497
1930[1]	5,573,596	-	1,183,298	2,049,285	3,176,348	458,392	732,025	1,779,338	14,952,287
1931[1]	6,034,794	-	1,035,169	2,140,792	3,211,183	488,995	551,595	1,996,819	15,459,347

[1] Includes statistics of trust companies chartered by the Government of Nova Scotia but inspected by the Dominion Department of Insurance.

32.—Liabilities and Assets of Trust Companies Chartered by the Dominion Government, 1914-31—concluded.

TRUST FUNDS—LIABILITIES.

Dec. 31—	Guaranteed Funds.			Estate, Trust and Agency Funds.	Total.
	Principal.[1]	Interest Due and Accrued.	Total.		
	$	$	$	$	$
1914	8,560,468	–	8,560,468	29,832,343	38,392,811
1915	9,727,099	–	9,727,099	31,002,934	40,730,033
1916	10,405,318	–	10,405,318	36,756,902	47,162,220
1917	11,149,958	–	11,149,958	38,141,389	49,291,347
1918	12,743,379	–	12,743,379	56,194,857	68,938,236
1919	12,704,672	–	12,704,672	52,084,047	64,788,719
1920	9,339,070	135,971	9,475,041	57,225,303	66,700,344
1921	8,424,128	125,514	8,549,642	79,252.639	87,802,281
1922	8,473,720	126,868	8,600,588	92,449,298	101,049,886
1923	10,306,767	178,096	10,484,863	102,764,835	113,249,698
1924	14,027,120	133,583	14.160,703	123,082,289	137,242,992
1925[2]	15,897,339	–	15,897,339	131,420,502	147,317,841
1926[2]	17,979,412	–	17,979,412	139,777,235	157,756,647
1927[2]	22,464,753	–	22,464,753	161.040,061	183,504,814
1928[2]	24,105,724	–	24,105,724	202,655,185	226,760,909
1929[2]	24,465,263	–	24,465,263	210,005,726	234,470,989
1930[2]	26,408,829	–	26,408,829	205,282,593	231,691,422
1931[2]	25,718,221	–	25,718,221	215,698.469	256,876,037

[1] Includes money in trust for investment amounting to $2,562,455 in 1914, $3,113,170 in 1915, $3,799,149 in 1916, $3,443,682 in 1917 and $5,170,463 in 1918; corresponding amounts are included under the heading "Estate, trust and agency funds" for the years 1920 to 1931. The figures for 1919 are not available. [2] Includes statistics of trust companies chartered by the Government of Nova Scotia but inspected by the Dominion Department of Insurance.

Section 4.—Sales of Canadian Bonds.

Interesting aspects of public financing and of the investment of capital in Canadian development during the twentieth century are illustrated by the sales of Canadian bonds since 1904 shown in Table **33**. (The figures are reproduced from *The Monetary Times Annual*, 1933.) In the first part of this table, the bonds sold in each year are divided according to whether the financing was for Dominion or Provincial Governments, or for municipalities, railways or other corporations, while in the second part of the table the sales in each year are distributed according to sales in Canada, the United States and Great Britain.

The total sales of Canadian bonds naturally reached a very high mark toward the close of the War owing to the Dominion Government financing required to cover the war expenditures. However, with the exception of the years 1918 and 1919, the total sales were greater in 1931 than in any other year, owing largely to the Dominion Government's conversion loans.

Dominion Government financing through bond sales since 1907 may be divided into three periods: the first from 1908 to 1914, when the money was required largely for internal development of the country, public works and Government railways; the second from 1915 to 1919, when war expenditures required very large borrowings; and the third since the War, when the issues have been largely required for refunding former loans at lower interest rates and for expenditures in connection with public works and railways.

Provincial bond issues have been on a much larger scale since the War than formerly, probably due to the development of provincially-owned public utilities and of improved highways. Sales of the bonds of Canadian municipalities, on the other hand, were greater in 1913, toward the end of the "land boom", than they have been in any other year, although sales in 1930 almost reached the record. However, allowing for the increased population in cities and towns, there has not been the same marked increase in the average annual sales of municipal bonds in the period since the War, compared with the period before the War, that is noticeable in the case of provincial bonds.

Sales of corporation bonds, which from 1926 to 1930 had averaged over $257,000,000 per year, dropped to $10,550,000 in 1932, this being largely due to the uncertainty of the industrial outlook. Railway bonds showed a somewhat similar decline to $12,500,000 in 1932.

A very striking change has taken place during the present century in the market in which Canadian bond issues are principally sold. Prior to the War, a great part of the capital required for Canadian development was drawn from Great Britain, and the major portion of Canadian bond issues were sold there. The coming of the War temporarily eliminated that market, and Canadians turned largely to the United States for outside capital. However, the great increase in wealth during and since the War has enabled a much greater proportion of public and industrial financing to be done at home, and beginning with the Victory Loan campaigns, Canadians not only learned how to invest their money in bonds, but had the necessary funds to invest on a large scale in bond issues. These facts are reflected by the figures in Table 33 showing that since 1915 a greatly increased proportion of the total issues of Canadian bonds has been sold within Canada. Thus, in 1932, 80 p.c. of all bonds issued were sold in Canada, 17 p.c. in the United States and 3 p.c. in Great Britain.

33.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1904-32.

(From *The Monetary Times Annual.*)

CLASSES OF BONDS.

Calendar Year.	Dominion.	Provincial.	Municipal.	Railway.	Corporation.	Total.
	$	$	$	$	$	$
1904	–	11,146,000	14,684,247	–	9,344,000	35,174,247
1905	–	346,087	9,013,168	–	125,515,281	134,874,531
1906	–	10,000,000	8,332,008	–	35,655,000	53,987,008
1907	–	9,274,000	14,430,540	–	58,931,200	82,635,740
1908	47,665,000	550,083	44,814,930	–	103,326,508	196,356,521
1909	62,500,000	9,187,500	31,532,960	100,803,180	61,134,612	265,158,252
1910	45,000,000	10,000,000	49,043,325	41,090,000	85,867,265	231,000.590
1911	–	11,375,000	30,295,838	85,611,265	139,530,885	266,812,988
1912	25,000,000	25,639,700	47,159,288	45,014,925	130,124,069	272,937,982
1913	34,066,666	36,850,000	110,600,936	65,895,880	126,381,813	373,795,295
1914	48,666,666	56,100,000	79,133,996	59,719,000	29,315,405	272,935,067
1915	170,000,000	48,105,000	67,393,328	33,675,000	15,933,000	335,106,328
1916	175,000,000	33,173,000	93,977,542	22,240,000	32,492,000	356,882,542
1917	650,000,000	15,300,000	24,198,079	17,700,000	18,850,000	726,039,079
1918	689,016,000	18,605,000	43,570,361	19,600,000	4,565,000	775,356,361
1919	753,000,000	52,374,000	26,274,089	35,359,133	42,930,000	909,937,222
1920	–	125,993,000	56,371,391	96,500,000	46,050,276	324,914,667
1921	–	160,745.400	84,776,931	96,733,000	61,335,825	403,591,156
1922	200,000,000	114,918,000	87,088,877	13,505,100	76,885,500	492,397,477
1923	200,000,000	106,279.000	83,686,422	27,500,000	97,352,320	514,817,742
1924	175,000,000	89,640,000	88,731,612	157,375,000	69,179,180	579,925,792
1925	169,333,333	106.970,000	46,218,987	40,925,195	120,085,833	483,533,348
1926	105,000,000	76,633,267	65,020,194	34,500,000	250,919,200	532,072,661
1927	45,000,000	114,795,500	72,742,114	80,000,000	289,680,067	602,217,681
1928	–	92,992,500	27,120,588	48,396,000	285,083,000	453,592,088
1929	–	119,960,500	98,667,809	199,200,000	243,330,600	661,158,909
1930	140,000,000	160,004,000	109,648,063	137,238,000	220,335,000	767.245,063
1931	858,109,300	126,239,205	85,290,066	121,750,000	59,432,000	1,250,820,571
1932	226,250,000	128,217,000	95,600,632	12,500,000	10,550,000	473,117,632

DISTRIBUTION OF SALES BY COUNTRIES.

Calendar Year.	Sold in Canada.	Sold in United States.	Sold in Great Britain.	Total.
	$	$	$	$
1904	24,235,247	8,354,500	2,584,500	35,174,247
1905	39,996,354	9,256,782	85,621,395	134,874,531
1906	23,304,958	4,118,350	26,563,700	53,987,008
1907	14,761,683	4,779,000	63,095,057	82,635,740
1908	24,585,140	6,316,350	165,455,031	196,356,521
1909	60,433,964	10,367,500	194,356,788	265,158,252
1910	39,296,462	3,634,000	188,070,128	231,000,590
1911	44,989,878	17,553,967	204,269,143	266,812,988
1912	37,735,182	30,966,406	204,236,394	272,937,982
1913	45,603,753	50,720,762	277,470,780	373,795,295
1914	32,999,860	53,944,548	185,990,659	272,935,067
1915	115,325,214	178,606,114	41,175,000	335,106,328
1916	102,938,778	206,943,764	47,000,000	356,882,542
1917	546,330,714	174,708.365	5,000,000	726,039,079
1918	727,446,361	33,310,000	14,600,000	775,356,361
1919	705,385,419	199,446,670	5,105,133	909,937,222
1920	101,830,667	223,084,000	–	324,914,667
1921	213,326,543	178,113,613	12,151,000	403,591,156
1922	250,184,984	242,212,493	–	492,397,477
1923	427,868,742	84,517,000	2,432,000	514,817,742
1924	336,758,887	239,544,405	3,622,500	579,925,792
1925	271,251,682	181,870,000	30,411,666	483,533,348
1926	263,862,718	259,209,943	9,000,000	532.072,661
1927	373,637,014	223,714,000	4,866,667	602,217,681
1928	278,080.088	159,512,000	16,000,000	453,592,088
1929	378,395,909	263,654,000	19,109,000	661,158,909
1930	368,868,063	393,632,000	4,745,000	767,245,063
1931	1,090,800,571	155,920,000	4,100,000	1,250,820,571
1932	377,752,632	81,015,000	14,350,000	473,117.632

Section 5.—Foreign Exchange.

The Canadian dollar, adopted as our currency in 1857, was equivalent to 15/73 of the pound sterling; in other words, the pound was equal to $4·866 in Canadian currency at par, and remained so, with minor variations between the import and export gold points representing the cost of shipping gold in either direction, until the outbreak of the Great War. Further, during the first eleven years after Confederation, the Canadian dollar was at a premium in the United States, as the United States dollar was not, after the Civil War, redeemable in gold until 1878. From the latter date, the dollar in the two countries was equivalent at par, and the variation was only between the import and export gold points or under $2 per $1,000.

At the outbreak of the Great War, both the pound sterling and the Canadian dollar were made inconvertible into gold and fell to a discount in New York, though this discount was "pegged" or kept at a moderate percentage by sales of United States securities previously held in Great Britain, borrowing in the United States, and, after the United States entered the War, by arrangements with the United States Government. After the War, the exchanges were "unpegged" about November, 1920, and the British pound went as low as $3.18 and the Canadian dollar as low as 82 cents in New York. In the course of the next year or two, exchange was brought practically back to par, and Great Britain resumed gold payment in 1925 and Canada on July 1, 1926. From then until 1928, the exchanges were within the gold points, but in 1929 the Canadian dollar again fell to a moderate discount in New York.

Recent Movements in Canadian Exchange.[1]—Because Canada has no foreign exchange mechanism of her own, Canadian transactions in exchange and monetary gold have been governed by New York and London. Great Britain buys much more from Canada than Canada buys from her, but the reverse is the case as regards the trade between Canada and the United States. The result is that there is a supply of bills on London in excess of the amount needed to meet current obligations in Great Britain. By offering these for sale for United States funds in London or New York, a triangular balance is approximated by book transactions and without the cross transfers of the larger quantities of gold which would otherwise be necessary. The volume of sterling exchange on Canadian account thus passed to the New York market does not greatly influence New York rates of sterling exchange under normal conditions; on the contrary, the volume of the New York-London transactions is sufficient to carry the Canadian rates along with them. Canadian exchange transactions with other countries are handled through London or New York and are unimportant of themselves, depending on the relationships with Canadian-New York and Canadian-London transactions.

In September, 1931, the equilibrium of international exchange was seriously disturbed. This unfortunate turn of events followed a period of over six years during which the nations of the world had worked steadily towards the stabilization of their currency systems upon a gold basis. Within two months of the time when Great Britain found it necessary to suspend free gold shipments, however, only a very small number of countries, including the United States and France, were left with currencies unshaken by preceding abnormal gold movements. The decision of Great Britain to go off the gold standard (Sept. 21, 1931) resulted in a sharp depreciation of sterling in New York, and partly owing to the triangular nature of the situation, but in some measure due to the immediate withdrawals of funds from Canadian banks by United States interests, short selling of Canadian exchange and other influences, Canadian rates depreciated also and have since fluctuated broadly with sterling.

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[1] Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics.

The weakness in Canadian dollar exchange during the last quarter of 1931 was checked with the turning of the year, and a steady recovery began which continued without interruption for three months. The extent of this improvement may be gauged by reference to the average premium quoted on U.S. funds in Montreal, which was reduced from 21 p.c. in December, 1931, to 11·4 p.c. in March, 1932. Canadian exchange in March reflected in part a rise in sterling which accompanied the repayment by the United Kingdom of large currency defence loans made in the preceding August. A minor reaction occurred in April and May, but steady strength was again apparent from June to October inclusive. Financing of the fall grain movement and bond flotations in New York contributed largely to the position attained by the Canadian dollar at this time. An appreciable set-back was experienced in the two closing months, but net gains for the year were nevertheless substantial.

34.—Monthly Averages of Exchange Quotations at Montreal, 1931 and 1932.

NOTE.—The nominal closing quotations in Canadian funds upon which these averages are based, have been supplied by the Bank of Montreal.

Month.	Australia. Pound.		Austria. Schilling.		Belgium. Belga.		Czecho-slovakia. Krone.		Denmark. Krone.		Finland. Markka.	
Par.	4·8666		·1407		·1390		·0296		·2680		·0252	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
	$	$	$	$	$	$	$	$	$	$	$	$
January	–	3·2074	·1409	·1668	·1397	·1631	·0296	·0347	·2678	·2214	·0252	·0187
February	–	3·1700	·1405	·1619	·1394	·1594	·0296	·0339	·2675	·2184	·0252	·0187
March	–	3·2492	·1408	·1576	·1393	·1555	·0296	·0339	·2676	·2236	·0252	·0190
April	–	3·3272	·1409	·1570	·1390	·1559	·0296	·0329	·2676	·2308	·0252	·0200
May	–	3·3385	·1412	·1596	·1393	·1590	·0296	·0336	·2679	·2285	·0252	·0199
June	–	3·3642	·1411	·1625	·1395	·1608	·0298	·0342	·2684	·2300	·0252	·0204
July	3·7436	3·2549	·1414	·1618	·1398	·1592	·0297	·0339	·2680	·2203	·0252	·0184
August	3·7576	3·1622	·1410	·1610	·1399	·1580	·0297	·0337	·2685	·2096	·0253	·0177
September	3·7761	3·0711	·1473	·1553	·1459	·1532	·0310	·0327	·2591	·1992	·0264	·0169
October	3·2675	2·9704	·1571	·1542	·1568	·1526	·0332	·0324	·2466	·1933	·0270	·0166
November	3·1766	3·0321	·1592	·1633	·1570	·1605	·0335	·0348	·2299	·1978	·0240	·0174
December	3·3129	3·0331	·1734	·1628	·1705	·1601	·0362	·0342	·2300	·1968	·0232	·0169

Month.	France. Franc.		Germany. Reichs-mark.		Holland. Guilder.		Italy. Lira.		Norway. Krone.		Spain. Peseta.	
Par.	·0392		·2382		·4020		·0526		·2680		·1930[1]	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
	$	$	$	$	$	$	$	$	$	$	$	$
January	·0393	·0460	·2382	·2772	·4030	·4710	·0524	·0591	·2677	·2193	·1037	·0977
February	·0392	·0450	·2377	·2719	·4013	·4614	·0523	·0595	·2675	·2155	·1026	·0886
March	·0391	·0438	·2382	·2654	·4010	·4490	·0524	·0578	·2676	·2192	·1080	·0847
April	·0391	·0438	·2382	·2642	·4016	·4524	·0523	·0573	·2676	·2124	·1041	·0858
May	·0391	·0447	·2381	·2696	·4021	·4594	·0523	·0583	·2679	·2108	·0972	·0925
June	·0392	·0453	·2379	·2732	·4033	·4664	·0524	·0590	·2684	·2092	·0974	·0951
July	·0392	·0449	·2345	·2723	·4038	·4622	·0524	·0585	·2680	·2024	·0930	·0926
August	·0393	·0446	·2382	·2710	·4046	·4584	·0525	·0583	·2685	·1982	·0883	·0919
September	·0411	·0433	·2477	·2629	·4212	·4438	·0544	·0567	·2670	·1932	·0941	·0897
October	·0441	·0429	·2616	·2604	·4534	·4404	·0579	·0560	·2467	·1882	·1001	·0897
November	·0442	·0453	·2674	·2750	·4542	·4648	·0582	·0592	·2282	·1941	·0970	·0946
December	·0480	·0451	·2885	·2751	·4930	·4643	·0626	·0590	·2287	·1954	·1026	·0943

For footnote see end of table, p. 924.

34.—Monthly Averages of Exchange Quotations at Montreal, 1931 and 1932—concluded.

Month.	Sweden. Krona.		Switzerland. Franc.		Argentine. Peso. (paper).		Brazil. Milreis.		Mexico. Peso.		Hong Kong. Dollar.	
Par.	·2680		·1930		·4244		·1196		·4985		·3000[1]	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
	$	$	$	$	$	$	$	$	$	$	$	$
January	·2682	·2256	·1939	·2285	·3092	·3032	·0926	·0760	·4661	·4635	·2452	·2883
February	·2678	·2210	·1928	·2218	·3208	·2958	·0861	·0743	·4655	·4204	·2264	·2942
March	·2679	·2207	·1924	·2156	·3457	·2872	·0812	·0713	·4751	·3786	·2524	·2713
April	·2679	·2121	·1926	·2162	·3373	·2884	·0744	·0766	·4761	·3693	·2451	·2660
May	·2682	·2142	·1931	·2219	·3132	·2909	·0687	·0856	·4841	·3429	·2401	·2628
June	·2687	·2162	·1942	·2250	·3093	·2964	·0757	·0886	·4926	·3118	·2468	·2727
July	·2682	·2092	·1949	·2234	·3091	·2954	·0728	·0877	·4929	·3221	·2500	·2650
August	·2686	·2033	·1958	·2214	·2868	·2903	·0634	·0854	·4933	·3295	·2400	·2674
September	·2730	·1971	·2046	·2133	·2797	·2803	·0635	·0827	·5151	·3319	·2618	·2627
October	·2595	·1921	·2197	·2113	·2646	·2816	·0682	·0820	·4707	·3430	·2754	·2542
November	·2289	·2028	·2200	·2227	·3028	·2986	·0741	·0868	·4495	·3781	·2964	·2616
December	·2308	·2075	·2387	·2224	·3188	·2990	·0783	·0867	·4773	·3747	·3089	·2502

Month.	India. Rupee.		Japan. Yen.		Shanghai. Tael.		London. Sterling.		New York. Dollar.	
Par.	·3650		·4985		·4167[1]		4·8666		1·00	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
	$	$	$	$	$	$	$	$	$	$
January	·3614	·3072	·4958	·4250	·3234	·3887	4·86275	4·01098	1·0020	1·1708
February	·3600	·3018	·4945	·3948	·2906	·3936	4·85764	3·96445	1·0002	1·1433
March	·3616	·3116	·4940	·3601	·3238	·3693	4·85089	4·06258	1·0002	1·1142
April	·3626	·3182	·4942	·3664	·3157	·3503	4·86010	4·15514	1·0004	1·1120
May	·3628	·3164	·4942	·3629	·3039	·3493	4·864675	4·17120	1·0005	1·1328
June	·3620	·3159	·4953	·3516	·3042	·3521	4·876325	4·20425	1·0026	1·1526
July	·3629	·3092	·4950	·3172	·3112	·3414	4·867056	4·06524	1·00321	1·1472
August	·3616	·3011	·4952	·2774	·2996	·3508	4·868630	3·95085	1·00304	1·1386
September	·3778	·2921	·5171	·2642	·3291	·3441	4·692867	3·83703	1·04293	1·1050
October	·3456	·2826	·5531	·2518	·3648	·3319	4·382308	3·71124	1·12370	1·0945
November	·3281	·2896	·5600	·2397	·3921	·3431	4·190870	3·78830	1·12342	1·1570
December	·3182	·2883	·5354	·2433	·4107	·3234	4·092308	3·78958	1·21048	1·1558

[1] Par rates given are those recognized in pre-war years, no post-war financial readjustment having been effected.

CHAPTER XXIII.—INSURANCE.[1]

Insurance business is transacted in Canada by companies of the following classes, *viz.*, (1) companies incorporated under the laws of the Dominion of Canada or of the late "Province of Canada", (2) companies incorporated under the laws of the provinces of Canada, and (3) companies incorporated or formed under the laws of British and foreign countries. The word "companies" as here used, includes fraternal benefit societies, associations and exchanges which transact the business of insurance. The Dominion Insurance Acts provide that companies of classes (1) and (3) above may not transact business anywhere in Canada unless registered[2] by the Dominion, but these Acts also provide that fire insurance on property in Canada may be effected in companies of class (3) even though not registered, if the insurance is effected without solicitation, advertising or the use of the mails, and if an office is not maintained in Canada, though property to be insured may be inspected and losses may be adjusted. Insurance so effected is generally known as "unlicensed insurance". Companies of class (2) above may transact business in the province of incorporation, subject to compliance with the laws thereof, or in any other province subject to compliance with the laws thereof, or, on compliance with the Dominion laws, may be granted Dominion registration. Most of these companies limit their business to the province of incorporation or to one or more other provinces; a few only have been granted Dominion registration.

What has been said above implies that jurisdiction concerning insurance companies and insurance business is divided between the Dominion and the provinces. There have been many references to the courts and appeals to the Privy Council with a view to determining the respective legislative domains, both in respect of insurance legislation specifically and in respect of legislation affecting companies generally, including insurance companies. The last Privy Council decision was handed down in 1931. It may now be taken as established that the Parliament of Canada may require companies formed or incorporated outside of Canada to obtain Dominion registration and continue to be so registered as a condition of transacting business in Canada, and these companies may be required to make returns from time to time of their business and doings in Canada and to furnish evidence of their solvency. The powers of the Dominion go much further in reference to companies incorporated by the Parliament of Canada, but include all of the powers which may be exercised over companies formed or incorporated outside of Canada and registered by the Dominion. The Acts passed in 1932[3] implement the powers of the Dominion as determined by the Privy Council decisions.

The Dominion Acts under which companies are registered are administered by the Department of Insurance under the Minister of Finance. The chief officer of the Department of Insurance is the Superintendent of Insurance. The first Superintendent was appointed in 1875 as head of a newly created Insurance Branch of the Department of Finance. In 1910 the Insurance Branch was constituted into a separate Department, the Department of Insurance, under the Minister of Finance.

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[1] The statistics of Fire, Life and Miscellaneous Insurance have been revised by G. D. Finlayson, Superintendent of Insurances, and those pertaining to Government Annuities by H. H. Ward, Deputy Minister of Labour.

[2] Prior to 1932, the Dominion Insurance Acts provided for the "licensing" of companies; the Acts passed in 1932 provide for "registration". The change in terminology does not mean any change in substance.

[3] The Canadian and British Insurance Companies Act, 1932 (22-3 Geo. V, c. 46). The Foreign Insurance Companies Act, 1932 (22-3 Geo. V, c. 47).

Precedent to obtaining first registration, in addition to filing certain documents, including a full and complete financial statement, a company must satisfy the Minister that it is sound and solvent and must make the required initial deposit of securities, varying from $10,000 to $100,000, depending on the class of business to be undertaken. Annual returns are required of all registered companies and the Acts require an examination to be made by the Superintendent or on his behalf, of the books and records of companies with a view to substantiating the accuracy of the statements filed and the soundness of the companies. Should any company show an unsatisfactory financial condition, the Acts require immediate remedial measures to be taken. British and foreign companies are required to maintain in Canada assets sufficient to cover all of their liabilities in Canada, while Canadian companies are required to maintain in Canada all of their assets except such as it may be necessary to deposit outside of Canada as security for "outside of Canada" business.

The statistics herein given in respect of companies registered by the Dominion are divided into three classes relating to: (1) insurance against fire, (2) life insurance, and (3) miscellaneous insurance, *viz.*, accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock, sickness, steam boiler, title, tornado and weather insurance. These statistics are compiled from the reports of the Department of Insurance; throughout they apply to calendar years.

Since 1915, the Department of Insurance has collected statistics, included herein, of business transacted by provincial companies licensed by the provinces, classified as to: (1) business transacted within the province of incorporation, and (2) business transacted in other provinces.

Further, returns in respect of "unlicensed insurance", above referred to, were required under Section 16 of the Special War Revenue Act for taxation purposes, and statistics compiled from these returns have been published in preceding editions of the Canada Year Book, following Table **7**. This section of the Act having been held unconstitutional by Privy Council decision, Oct. 22, 1931, on an appeal from the Court of the King's Bench of the province of Quebec, the returns for 1930 are incomplete; consequently the table is omitted from the present edition. By an amendment to the Act at the last session of Parliament, a section analogous to Section 16 was enacted, applicable to unlicensed insurance. Further, provision is also made for returns of unlicensed insurance under the Foreign Insurance Companies Act, 1932, and under the Canadian and British Insurance Companies Act, 1932, so that statistics for 1932 and following years will be available.

Statistics of Dominion Government annuities are given at the end of this chapter. The Department of Labour administers the Acts under which these annuities are sold.

Section 1.—Fire Insurance.

Fire insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the sea ports and operated by local merchants. The oldest existing agency of a British company is that of the Phœnix Fire Office of London, now the Phœnix Assurance Co., Ltd., which commenced business in Montreal in 1804. On account of the growth of the insurance business of these early British companies, branch offices were established and local managers were appointed, charged with directing the companies' affairs in Canada.

The Halifax Fire Insurance Co. is the first purely Canadian company of which any record is available. Founded in 1809 as the Nova Scotia Fire Association, it was chartered in 1819 and operated in the province of Nova Scotia until 1919, when it was granted a Dominion licence. Among the other pioneer fire insurance companies still in operation, mention may be made of the following: the Quebec Fire Assurance Co., which commenced business in 1818 and was largely confined in ownership and operations to Quebec province; the British America Assurance Co., incorporated in 1833, the oldest company in Ontario; the Western Assurance Co., organized in 1851, and, after a rapid and steady growth, one of the largest companies of its kind on the continent; two United States companies, the Ætna Insurance Co., Hartford, Conn., and the Hartford Fire Insurance Co., which commenced business in Canada in 1821 and 1836 respectively.

The report of the Superintendent of Insurance for the year ended Dec. 31, 1931, shows that at that date there were 243 fire insurance companies doing business in Canada under Dominion licences; of these 52 were Canadian, 66 were British and 125 were foreign companies, whereas in 1875, the first year for which authentic records were collected by the Department of Insurance, 27 companies operated in Canada—11 Canadian, 13 British and 3 American. The proportionate increase in the number of British and foreign companies from 59 p.c. to 79 p.c. of the total number is a very marked point of difference between the fire and life insurance businesses in Canada, the latter being carried on very largely by Canadian companies.

Although in its early days the Dominion did not prove a very lucrative field for fire insurance companies, the great advance in building construction and the wide use of improved fire appliances and safety devices have materially reduced the danger of serious conflagrations and have placed the risks assumed by companies in Canada on an equality with those of other countries.

A feature of the fire insurance business, besides the increase in premiums received, is the continued increase in the number of companies which are operating on the mutual or reciprocal plan. These companies, in which all profits or losses are directly received or paid by the policyholders, are making themselves felt as competitive factors in the fire insurance business.

Statistics of Fire Insurance.—Statistical tables of fire insurance in Canada follow, illustrative of the progress of total business since 1869 and of the operations of individual companies for the year 1931. The net amount of fire insurance in force on Dec. 31, 1931, with companies holding Dominion licences, was $9,544,641,293, while the net amount in force with provincial companies on the same date was $1,341,184,333. In addition, policies amounting to $1,005,857,392 were in force during the year 1929 (the latest year for which information is available, see p. 937) by companies, associations or underwriters not licensed to transact business in Canada. Thus the grand total fire insurance in force on Dec. 31, 1931, probably approximated $12,000,000,000. According to preliminary figures, fire insurance in force in companies registered by the Dominion decreased by $290,263,005 in 1932.

Table **1** shows figures of the growth since 1869 of companies registered by the Dominion, the relationship between losses paid and net premiums written, and the variation in the cost per $100 of insurance. It will be observed that the cost of insurance reached a maximum in 1904 and 1905; there has since been a steady decrease with the exception of the years 1921, 1922 and 1924, when temporary reversals of the downward swing were in evidence. It is noteworthy that the cost of fire insurance has decreased by 50 p.c. since 1905. Table **2** shows the business done in Canada by individual companies during the year 1931, while in Tables **3**, **4** and **5** are given figures of the assets, liabilities, income and expenditure during the years 1927 to 1931, classified by nationality of companies. A further summary of business is given by provinces in Table **6** for the years 1930 and 1931, showing premiums and losses classified by provinces and by nationality of companies. Further, a general summary of the business transacted by both Dominion and provincial licensees is given in Table **7**.

1.—Summary Statistics of Fire Insurance, in Companies Operating under Dominion Licences, calendar years 1869-1932.

Year.	Amount in Force at end of Year.	Net Premiums Written during Year.	Losses Paid during Year.	Percentage of Losses to Premiums.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.[1]	Average Cost per $100 of Insurance.
	$	$	$	p.c.	$	$	$
1869	188,359,809	1,785,539	1,027,720	57·56	171,540,475	-	-
1870	191,549.586	1,916,779	1,624,837	84·77	199,102,070	-	-
1871	228,453.784	2,321,716	1,549,199	66·73	244,437,172	-	-
1872	251,722,940	2.628,710	1,909,975	72·66	277,387,271	-	-
1873	278,754,835	2,968,416	1,682,184	55·67	271,095,928	-	-
1874	306,844,219	3,522,303	1,926,159	54·68	329,178,974	-	-
1875	364.421,029	3,594,764	2,563,531	71·31	331,098,419	-	-
1876	404,608,180	3,708,006	2,867,295	77·33	401,148,747	-	-
1877	420.342,681	3,764,005	8,490,919	225·58	385,736,566	3,817,360	0·99
1878	409,899,701	3,368,430	1,822,674	54·11	359,847,757	3,723,530	1·35
1879	407,357,985	3,227,488	2,145,198	66·47	360,704,419	3,608,501	1·00
1880	411,563,271	3,479,577	1,666,578	47·90	384,051,861	3,958,437	1·03
1881	462,210.968	3,827,116	3,169,824	82·83	441,416,238	4,414,728	1·00
1882	526,856,478	4,229,706	2,664,986	63·01	478,044,416	4,850,717	1·01
1883	572.264,041	4,624,741	2,920,228	63·14	513,580,302	5,379,950	1·05
1884	605,507,789	4,980,128	3,245,323	65·16	513,983,378	5,934,773	1·15
1885	611,794,479	4,852,460	2,679,287	55·22	486,002,908	5,684,758	1·17
1886	586,773,022	4,932,335	3,301,388	66·93	505,752,907	5,854,172	1·16
1887	634,767,337	5,244,502	3,403,514	64·90	532,757,088	6,145,188	1·15
1888	650,735,059	5,437,263	3,073,822	56·53	541,580,007	6,390,296	1·18
1889	684,538,378	5,588,016	2,876,211	51·47	572,782,104	6,628,336	1·16
1890	720,679,621	5,836,071	3,266,567	55·97	620,723,945	7,019,319	1·13
1891	759.602,191	6.168.716	3,905,697	63·31	623,418,422	7,248,495	1·16
1892	821,410,072	6,512,327	4,377,270	67·22	687,175,688	8,086,503	1·18
1893	814,687,057	6,793,595	5,052,690	74·37	687,604,239	8,115,594	1·18
1894	836,067,202	6,711,369	4,589,363	68·38	653,589,428	8,158,033	1·25
1895	837,872,864	6,943,382	4,993,750	71·92	667,639,048	8,243,605	1·23
1896	845,574,352	7,075,850	4,173,501	58·98	669,288,650	8,397,876	1·25
1897	868.522,217	7,157,661	4,701,833	65·69	663,698,309	8,304,227	1·25
1898	895,394,107	7,350,131	4,784,487	65·09	681,160,689	8,564,124	1·26
1899	936,869,668	7,910,492	5,182,038	65·51	756,257,098	9,316,685	1·23
1900	992,332,360	8,331,948	7,774,293	93·31	803,428,654	10,031,735	1·25
1901	1,038,687,619	9,650,348	6,774,956	70·20	821,522,854	11,688,958	1·42
1902	1,075,263,168	10,577,084	4,152,289	39·26	892,049,886	13,087,251	1·47
1903	1,140,453,716	11,384,762	5,870,716	51·57	933,274,764	14,038,182	1·50
1904	1,215,013,931	13,169,882	14,099,534	107·06	1,002,305,105	16,006,969	1·60
1905	1,318,146,495	14,285,671	6,000,519	42·00	1,140,095,372	18,262,037	1·60
1906	1,443,902,244	14,687,963	6,584,291	44·83	1,210,099,865	18,554,730	1·53
1907	1,614,703,536	16,114,475	8,445,041	52·41	1,364,204,991	20,492,863	1·50
1908	1,700,708,263	17,027,275	10,279.455	60·37	1,466,294,021	21,968,432	1·50
1909	1,863,276,504	17,049,464	8,646,826	50·72	1,579,975,867	22,293,633	1·41
1910	2,034,276,740	18,725,531	10,292,393	54·96	1,817,055,685	24,684,296	1·36
1911	2,279,868,346	20,575,255	10,936,948	53·16	1,987,640,591	26,867,170	1·35
1912	2,684,355,895	23.194,518	12,119,581	52·25	2,374,161,732	30,639,867	1·29
1913	3,151,930.389	25,745,947	14,003,759	54·39	2,925,200,553	36,032,461	1·21
1914	3.456,019,009	27.499.158	15,347,284	55·81	3,104.101,568	36,185,927	1·17
1915	3.531.620,802	26,474,833	14,161,949	53·49	3,111,552,903	36,048,345	1·16

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[1] Figures from 1869–76 not available.

1.—Summary Statistics of Fire Insurance in Companies Operating under Dominion Licences, calendar years 1869-1932—concluded.

Year.	Amount in Force at end of Year.	Net Premiums Written during Year.	Losses Paid during Year.	Percentage of Losses to Premiums.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.	Average Cost per $100 of Insurance.
	$	$	$	p.c.	$	$	$
1916	3,720,058,236	27,783,852	15,114,063	54·40	3,418,238,860	37,231,691	1·09
1917	3,986,197,514	31,246,530	16,379,101	52·42	4,049,059,999	43,515,822	1·07
1918	4,523,514,841	35,954,405	19,359,352	53·84	4,606,035,056	48,770,112	1·06
1919	4,923,024,381	40,031,474	16,679,355	41·67	5,423,569,961	57,577,632	1·06
1920	5,969,872,278	50,527,937	21,935,387	43·41	6,790,670,610	71,143,917	1·05
1921	6,020,513,832	47,312,564	27,572,560	58·28	6,139,531,168	68,161,786	1·11
1922	6,348,637,436	48,168,310	32,848,020	68·19	6,471,133,294	68,347,294	1·06
1923	6,806,937,041	51,169,250	32,142,494	62·82	7,311,835,110	73,037,471	1·00
1924	7,224,475,267	49,833,718	29,186,904	58·57	6,987,536,461	71,146,802	1·02
1925	7,583,297,899	51,040,075	26,943,089	52·79	7,646,026,535	74,679,130	0·98
1926	8,051,444,136	52,595,923	25,705,975	48·87	8,716,166,834	81,104,612	0·93
1927	8,287,732,966	51,375,637	20,831,931	40·55	8,531,139,424	76,423,855	0·90
1928	8,761,579,512	54,826,851	25,544,664	46·57	9,187,224,958	80,413,215	0·88
1929	9,431,169,594	56,112,457	30,209,839	53·84	10,791,096,165	87,317,411	0·81
1930	9,672,996,973	52,646,520	30,427,968	57·71	10,311,193,608	82,700,147	0·80
1931	9,544,641,293	50,342,669	29,938,409	59·47	10,789,737,477	86,741,053	0·80
1932[2]	9,254,378,288	46,933,288	30,115,677	64·15	10,326,272,133	81,856,643	0·79

[2] Figures for 1932 are subject to revision.

2.—Fire Insurance Business Transacted in Canada, by Companies, 1931.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.	Rate of Premiums per cent of Risks.	Net Cash Premiums Written.	Net Losses Incurred.	Percentage of Losses Paid to Premiums Received.
	$	$	p.c.	$	$	p.c.
Canadian Companies.						
Acadia	54,293,701	613,828	1·13	211,546	114,381	54·07
Antigonish	344,950	3,887	1·13	3,887	3,565	91·72
Beaver	14,588,389	124,093	·85	29,812	14,711	49·35
British America	72,696,217	666,800	·92	433,753	268,668	61·94
British Canadian	16,988,415	172,186	1·01	99,522	68,493	68·82
British Colonial	62,029,704	604,861	·98	269,221	199,435	74·08
British Empire	19,325,758	217,421	1·13	135,076	86,565	64·09
British Northwestern	58,972,648	335,335	·57	173,540	81,048	46·70
Canada Accident and Fire	48,015,861	412,140	·86	206,084	108,700	52·75
Canada National	19,973,194	213,890	1·07	120,666	77,138	63·93
Canada Security	31,906,472	314,650	·99	150,018	67,147	44·76
Canadian Fire	64,764,432	593,367	·92	452,550	179,993	39·77
Canadian General	35,032,691	304,764	·87	127,199	91,465	71·91
Canadian Indemnity	16,910,180	188,252	1·11	140,205	87,806	62·63
Canadian Surety	12,840,697	90,970	·71	35,113	13,967	39·78
Casualty Company	8,840,139	70,201	·79	38,026	6,894	18·13
Commerce Mutual	9,504,546	559,746	5·89	241,247	106,688	44·22
Consolidated Fire	19,464,470	189,856	·98	86,326	48,724	56·44
Cumberland	230,025	3,465	1·51	3,400	1,722	50·63
Dominion Fire	54,191,746	493,390	·91	308,340	139,071	45·10
Dominion of Canada General	54,845,012	397,074	·72	212,807	71,935	33·80
Ensign	11,697,828	116,692	1·00	69,188	38,248	55·28
Fire Insurance Co. of Canada	64,772,055	652,748	1·01	308,565	195,372	63·32
General Accident of Canada	23,174,188	191,639	·83	90,564	40,137	44·32
Globe Indemnity	62,351,352	448,814	·72	142,044	80,629	56·76
Grain	56,606,025	426,073	·75	335,545	142,984	42·61
Guardian Insurance	42,747,673	344,385	·81	160,381	74,613	46·52
Halifax	47,381,379	445,450	·94	110,882	66,240	59·74
Hudson Bay	126,876,876	773,923	·61	210,990	108,592	51·64
Imperial Guarantee	21,130,606	130,389	·62	64,711	38,106	58·89

2.—Fire Insurance Business Transacted in Canada, by Companies, 1931—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.	Rate of Premiums per cent of Risks.	Net Cash Premiums Written.	Net Losses Incurred.	Percentage of Losses Paid to Premiums Received.
	$	$	p.c.	$	$	p.c.
Canadian Companies—concluded.						
Imperial Insurance	33,905,143	286,604	·85	128,107	75,058	58·59
Kings Mutual	2,819,290	42,524	1·51	41,351	22,114	53·48
Laurentian	2,150,635	28,922	1·34	—69,381	25,832	-
Liverpool—Manitoba	70,219,907	597,905	·85	248,526	140,449	56·51
London and Lancashire G'tee	5,511,648	56,550	1·03	21,821	9,278	42·52
London-Canada	27,828,333	261,689	·94	148,112	89,973	60·75
Mercantile	49,324,474	305,923	·62	124,122	55,988	45·11
Mount Royal	62,392,297	597,901	·96	—75,975	195,459	-
National Liverpool	28,687,999	276,465	·96	71,022	41,004	57·73
North Empire	37,607,786	393,212	1·05	130,890	76,677	58·58
North West Fire	17,861,588	170,992	·96	95,549	60,755	63·59
Occidental	51,289,888	438,171	·85	202,096	97,099	48·05
Pacific Coast	35,906,843	291,937	·81	120,584	62,574	51·89
Pictou County	753,825	6,754	·90	6,678	3,909	58·54
Pioneer	46,162,745	359,113	·78	147,563	62,194	42·15
Portage la Prairie	44,029,165	664,610	1·51	375,513	228,307	60·80
Quebec	48,365,188	391,024	·81	166,454	81,378	48·89
Reliance	23,400,968	166,708	·71	81,773	39,357	48·13
Scottish Canadian	23,043,396	184,292	·80	79,687	46,893	58·85
Trans-Canada	21,414,348	225,171	1·05	127,809	78,573	61·48
Wawanesa	106,738,284	1,611,512	1·51	1,038,491	555,334	53·48
Western	139,535,789	1,026,685	·74	606,557	377,286	62·20
Totals, Canadian	**2,011,446,768**	**18,484,953**	**·92**	**8,788,558**	**5,048,528**	**57·44**
British Companies.						
Alliance	85,115,018	561,678	·66	465,839	314,199	67·45
Anglo-Scottish	45,599,688	326,478	·32	152,489	74,074	48·58
Atlas	121,682,128	861,749	·71	686,188	433,349	63·15
Bankers' and Traders'	3,433,743	42,806	1·25	—32,269	17,075	-
British and European	11,308,999	97,408	·86	52,028	36,295	69·76
British Crown	59,839,539	441,591	·74	316,295	186,463	58·95
British General	24,644,699	173,333	·70	108,161	89,418	82·67
British Law	13,594,922	107,810	·79	73,998	68,147	92·09
British Oak	18,976,767	157,537	·83	119,567	97,751	81·75
British Traders'	47,172,836	242,173	·51	171,648	88,716	51·69
Caledonian	51,083,044	462,215	·90	325,838	152,575	46·83
Car and General	40,319,487	287,996	·71	161,183	69,501	43·12
Central	31,210,568	246,350	·79	161,254	86,636	53·73
Century	54,670,452	420,989	·77	222,966	114,934	51·55
China	7,041,105	42,169	·60	29,589	14,479	48·93
Commercial Union	131,971,585	1,017,241	·77	706,721	401,366	56·79
Cornhill	35,223,537	260,635	·74	221,617	116,807	52·71
Eagle Star	88,114,769	552,574	·63	372,151	261,780	70·34
Employers' Liability	136,385,884	918,275	·67	662,198	370,593	55·96
Essex and Suffolk	33,285,579	203,409	·61	81,709	37,940	46·43
General Accident Fire	68,805,342	455,735	·66	339,237	190,693	56·21
Guardian Assurance	156,388,935	1,372,253	·88	1,056,487	670,110	63·43
Guildhall	13,640,206	100,140	·73	69,468	55,819	80·35
Law Union and Rock	50,257,963	450,234	·90	359,100	227,902	63·46
Legal and General	21,342,887	192,007	·90	144,223	76,026	52·71
Liverpool and London and Globe	221,141,376	1,817,264	·82	1,164,458	688,254	59·11
Local Government	13,428,669	130,317	·97	73,425	32,010	43·60
London and Lancashire Ins.	197,709,288	1,497,318	·76	1,171,895	820,128	69·98
London and Provincial	6,864,845	64,588	·94	48,031	32,496	67·66
London and Scottish	24,090,421	158,510	·66	98,651	60,347	61·17
London Assurance	67,832,683	552.303	·81	447,482	226,618	50·64
London Guarantee	46,519,393	471,960	1·01	74,442	76,978	103·41
Marine	None	None	-	None	None	-
Merchants' Marine	43,958,968	271,280	·62	189,659	90,320	47·62
Motor Union	18,307,750	163,738	·89	105,688	65,676	62·14
National Provincial	26,950,976	199,297	·74	135,701	59,163	43·60
North British	181,392,461	1,292.800	·71	875,336	478,675	54·68
Northern Assurance	111,134,483	814,493	·73	597,298	335,396	56·15
Norwich Union	145,417,108	1,190,574	·82	879,969	533,702	60·65

2.—Fire Insurance Business Transacted in Canada, by Companies, 1931—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.	Rate of Premiums per cent of Risks.	Net Cash Premiums Written.	Net Losses Incurred.	Percentage of Losses Paid to Premiums Received.
	$	$	p.c.	$	$	p.c.
British Companies— concluded.						
Ocean Accident and Guarantee	63,032,036	480,201	·76	329,611	181,448	55·05
Palatine	57,384,136	455,080	·79	301,124	163,895	54·43
Patriotic	35,741,301	215,429	·60	139,234	101,331	72·78
Pearl	26,585,117	202,575	·76	151,902	103,729	68·29
Phœnix of London	312,681,474	2,582,978	·83	1,279,830	850,946	66·49
Planet	27,542,751	184,793	·67	109,637	83,512	76·17
Provincial	37,698,553	372,182	·99	297,302	153,754	51·72
Prudential	113,688,376	646,036	·57	486,830	397,038	81·56
Queensland	1,209,623	14,725	1·21	—158,673	3,481	–
Railway Passengers'	13,044,829	88,236	·68	48,767	28,368	58·17
Royal Exchange	136,367,441	888,462	·65	630,832	373,293	59·17
Royal Insurance	571,010,914	4,015,919	·70	1,833,968	1,011,158	55·14
Royal Scottish	35,675,177	236,519	·66	151,182	74,925	49·56
Scottish Metropolitan	36,309,788	287,598	·79	180,638	134,938	74·70
Scottish Union	53,596,549	442,575	·83	375,788	228,117	60·70
Sea	32,416,129	202,878	·63	159,969	112,036	70·04
Southern	3,238,523	23,209	·72	13,146	1,215	9·24
State Assurance	21,992,728	146,518	·67	103,910	47,799	46·00
Sun Insurance	148,332,951	1,096,293	·74	749,451	474,486	63·31
Union Assurance	82,580,166	655,876	·79	445,509	217,243	48·76
Union of Canton	70,943,243	436,066	·61	298,275	119,500	40·06
Union Marine	38,466,828	319,681	·83	411,232	152,985	37·20
United British	14,414,058	116,085	·81	78,260	32,985	42·15
Westminster	9,887,002	66,982	·68	None	None	–
World Marine	26,582,202	130,713	·49	89,795	61,114	68·06
Yangtsze	4,172,245	28,567	·68	—6,557	56,456	–
Yorkshire	50,579,270	434,254	·86	337,823	213,810	63·29
Totals, British	**4,481,031,513**	**33,389,657**	**·75**	**21,728,506**	**13,131,972**	**60·44**
Foreign Companies.						
Ætna	84,977,187	496,602	·58	414,030	218,372	52·73
Agricultural	20,658,996	107,237	·52	62,470	41,754	66·84
Alliance Insurance	62,313,984	371,302	·60	135,454	100,443	74·15
American Alliance	35,554,606	263,884	·74	66,071	27,880	42·20
American Central	21,368,802	192,012	·90	81,674	111,894	137·00
American Colony	7,685,444	53,769	·70	40,582	28,923	71·27
American Constitution Fire	518,417	3,684	·71	3,031	1,034	34·13
American Equitable	19,795,192	145,575	·74	125,606	85,342	67·94
American Exchange	5,974,000	18,551	·31	16,775	106	·63
American Home Fire	21,997,186	198,117	·90	143,865	71,640	49·80
American Insurance	31,159,748	196,275	·63	112,969	67,527	59·77
American Reserve	19,897,494	104,487	·53	56,336	60,825	107·97
Automobile	1,445,330	8,614	·60	7,530	33	·44
Baloise	13,712,647	153,291	1·12	116,017	76,664	66·08
Boston	18,577,150	115,564	·62	70,077	65,666	93·71
Caledonian-American	10,838,421	102,887	·95	57,349	17,603	30·69
California	15,820,130	129,250	·82	88,490	61,928	69·98
Camden	11,386,161	70,495	·62	45,624	31,861	69·83
Central Manufacturers'	6,884,957	80,436	1·17	66,016	19,584	29·67
Central Union	7,567,195	47,853	·63	16,499	5,192	31·47
Chicago Fire and Marine	–	–	–	–	–	–
Citizens of New Jersey	18,332,762	97,531	·53	32,700	22,063	67·47
City of New York	12,703,130	99,779	·79	None	None	–
Columbia	58,864,515	499,027	·85	81,218	38,064	46·87
Commercial Union of N.Y.	333,284	3,896	1·17	10,343	8,834	85·41
Connecticut	51,441,177	382,389	·74	181,104	99,511	54·95
Continental	76,082,260	582,558	·77	428,105	256,127	59·83
Cosmopolitan	3,797,508	30,995	·82	2,895	16,624	574·18
County Fire	166,035,235	1,743,897	1·05	17,857	7,126	39·91
Equitable Fire and Marine	23,428,209	169,574	·72	33,221	19,902	54·95
Federal	None	None	–	None	None	–
Fidelity American	1,287,400	14,892	1·16	—18,676	8,570	–
Fidelity-Phenix	70,937,386	497,404	·70	367,614	207,568	56·46

7.—Fire Insurance Business Transacted in Canada, by Companies, 1931—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.	Rate of Premiums per cent of Risks.	Net Cash Premiums Written.	Net Losses Incurred.	Percentage of Losses Paid to Premiums Received.
	$	$	p.c.	$	$	p.c.
Foreign Companies— continued.						
Fire Association of Penna....	32,421,561	246,589	·76	113,046	104,812	92·72
Fireman's Fund............	49,597,716	316,463	·64	229,014	128,553	56·13
Firemen's Insurance.........	26,356,516	275,737	1·05	216,598	124,755	57·60
Fire Reassurance............	38,152,008	312,233	·82	169,944	111,584	65·66
First American............	10,928,719	100,688	·92	68,655	39,423	57·42
First National............	15,896,124	135,608	·85	91,881	64,057	69·72
La Foncière............	21,399,788	220,113	1·03	168,110	123,603	73·53
Franklin............	28,148,532	225,181	·80	None	None	-
Fulton Fire............	2,246,887	19,372	·86	14,043	4,282	30·49
General of Paris............	30,429,172	252,091	·83	157,096	78,043	49·68
Gen. Insurance of America..	27,659,437	218,987	·79	167,551	54,601	32·59
Germanic............	6,031,624	67,111	1·11	50,190	13,107	26·11
Girard............	4,988,706	46,484	·93	35,142	25,848	73·55
Glens Falls............	38,839,285	279,289	·72	185,233	89,422	48·28
Globe and Rutgers.........	172,467,901	1,202,450	·70	794,227	467,638	58·88
Granite State............	6,919,910	48,144	·70	32,889	22,273	67·72
Great American............	252,441,635	2,343,479	·93	870,719	360,349	41·38
Hanover............	34,447,986	211,548	·61	141,298	77,319	54·72
Hardware Dealers'.........	21,716,674	383,860	1·77	272,325	122,858	45·11
Hartford Fire............	139,567,132	1,011,964	·73	872,689	434,853	49·84
Home Fire and Marine.....	12,977,082	66,677	·51	56,451	24,157	42·79
Home Insurance............	271,508,760	2,244,815	·83	1,728,912	1,283,641	74·25
Homestead............	6,647,299	65,298	·98	None	None	–
Imperial Assurance.........	43,523,271	388,109	·89	173,394	76,267	43·98
Insurance Co. of N. A.......	127,889,450	802,803	·63	583,791	388,302	66·51
Insurance Co. of State of Pa.	36,056,860	239,391	·66	136,486	89,246	65·39
La Salle............	834,887	4,976	·60	—307	1,851	–
Lincoln............	29,911,168	367,897	1·22	118,949	146,667	123·30
Lumbermen's Insurance.....	14,588,661	122,169	·84	99,614	49,056	49·25
Lumbermen's Mutual Ins....	7,633,684	109,833	1·44	90,522	21,193	23·41
Lumber Mutual............	979,436	15,769	1·61	13,717	8,560	62·40
Maryland Insurance.........	13,083,297	117,133	·90	82,333	65,304	79·32
Mechanics' and Traders'....	1,288,180	14,950	1·16	12,106	12,260	101·27
Merchants' and Manufacturers'............	30,410,708	271,503	·89	178,010	81,658	45·87
Merchants' Fire............	33,017,299	283,431	·86	237,434	132,867	55·96
Mercury............	21,770,435	158,998	·73	117,685	55,623	47·26
Michigan Fire............	10,968,308	101,116	·92	61,236	32,962	53·83
Millers' National............	21,256,379	219,811	1·03	152,444	103,816	68·10
Mill Owners' Mutual........	33,389,061	450,599	1·35	294,158	165,410	56·23
Milwaukee Mechanics'......	None	None	–	—638	4,933	–
Minnesota Implement.......	21,716,674	383,860	1·77	272,325	122,858	45·11
National-Ben Franklin......	27,566,164	296,721	1·08	224,788	156,072	69·43
National Fire of Hartford...	81,212,983	551,541	·68	404,395	236,970	58·60
National Liberty............	9,637,681	81,661	·85	None	None	–
National Union............	29,866,943	209,484	·70	173,765	87,962	50·62
La Nationale............	58,475,624	645,617	1·10	544,239	414,522	76·17
Newark............	63,162,597	456,780	·72	140,418	76,326	54·36
New Brunswick............	39,561,217	175,391	·44	None	None	–
New Hampshire............	32,214,939	244,900	·76	164,599	115,800	70·35
New Jersey............	6,768,300	63,305	·94	43,187	17,300	40·06
New York Fire............	23,031,613	207,131	·90	157,569	73,804	46·84
New York Underwriters....	63,013,884	446,724	·71	44,234	21,466	48·53
Niagara	36,458,740	244,232	·67	179,518	193,868	107·99
North River............	34,329,813	171,669	·50	102,737	66,041	64·28
Northwestern Mutual.......	76,115,371	1,207,193	1·59	879,821	357,917	40·68
Northwestern National.....	32,247,705	347,901	1·08	236,007	133,993	56·78
Ohio Farmers'............	3,120,695	32,056	1·03	32,033	1,966	6·14
Pacific American............	16,945,865	285,361	1·68	85,921	29,190	33·97
Pacific Fire............	48,772,067	376,861	·77	297,616	192,536	64·69
Pennsylvania Lumbermen's.	446,523	8,659	1·94	7,626	2,844	37·29
Phenix of Paris............	25,351,622	226,827	·89	143,305	77,903	54·36
Philadelphia Fire............	3,785,931	25,065	·66	17,211	980	5·69
Phœnix of Hartford.........	94,206,923	678,361	·72	300,115	164,904	54·95
Pilot Reinsurance..........	None	None	–	None	None	–
Providence Washington.....	27,702,508	176,050	·64	97,755	69,957	71·56
Provident of Paris..........	4,919,000	58,811	1·20	43,880	40,012	91·19

2.—Fire Insurance Business Transacted in Canada, by Companies, 1931—concluded.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged thereon.	Rate of Premiums per cent of Risks.	Net Cash Premiums Written.	Net Losses Incurred.	Percentage of Losses Paid to Premiums Received.
	$	$	p.c.	$	$	p.c.
Foreign Companies— concluded.						
Queen of America	231,761,264	1,697,217	·73	506,067	310,089	61·27
Republic	13,033,755	101,715	·78	74,617	57,852	77·53
Retail Hardware	21,716,674	383,860	1·77	272,325	122,858	45·11
Rhode Island	12,380,823	73,063	·59	47,292	29,541	62·47
Rossia	71,324,572	526,955	·74	290,981	182,294	62·65
"Rossia" of Copenhagen	8,211,318	41,734	·51	−6,029	29,284	–
St. Paul Fire	56,661,317	371,712	·66	245,463	138,986	56·62
Security	27,531,640	193,019	·70	115,138	66,795	58·01
Sentinel	13,358,933	93,528	·70	11,270	6,357	56·41
Springfield	85,639,272	535,527	·63	338,340	197,861	58·48
Stuyvesant	38,056,083	339,366	·89	270,047	181,795	67·32
Sussex	10,161,551	92,498	·91	66,761	47,000	70·40
Svea	5,610,741	41,631	·74	27,669	21,982	79·45
Tokio	9,499,593	47,173	·50	22,379	15,850	70·83
Transcontinental	2,019,850	10,585	·52	8,644	604	6·99
Travelers' Fire	20,605,605	109,013	·53	91,335	46,478	50·89
L'Union of Paris	41,644,574	303,579	·73	232,664	157,693	67·78
United Firemen's	10,978,812	106,623	·97	132,217	38,298	28·97
United Mutual	12,353,139	182,797	1·48	107,580	52,088	48·42
United States Fire	75,790,173	468,584	·62	345,741	212,543	61·47
United States Merchants'	None	None	–	None	None	–
Universal	20,949,056	161,269	·77	113,660	55,577	48·90
L'Urbaine	None	None	–	None	None	–
Virginia Fire	6,885,425	46,829	·68	6,343	10,126	159·64
Westchester	42,125,880	254,734	·60	153,315	94,051	61·35
World Fire	18,560,313	136,779	·74	105,988	56,907	53·69
Totals, Foreign	**4,297,259,196**	**34,866,447**	**·81**	**19,825,605**	**11,757,919**	**59·31**
Grand Totals	**10,789,737,477**	**86,741,056**	**·80**	**50,342,669**	**29,938,469**	**59·47**

3.—Assets of Canadian Companies Selling Fire Insurance, or Fire Insurance and other classes of Insurance, and Assets in Canada of Companies other than Canadian Transacting such Business in Canada, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Canadian Companies.					
Real estate	3,213,096	2,827,672	2,425,285	2,511,558	2,511,543
Loans on real estate	4,223,583	3,492,620	3,229,804	1,778,085	1,735,227
Stocks, bonds and debentures	34,129,480	40,093,447	46,724,485	48,499,291	45,313,224
Agents' balances and premiums outstanding	3,803,900	4,161,359	4,272,065	4,388,152	3,775,499
Cash on hand and in banks[1]	4,415,976	5,671,692	4,937,126	4,735,137	5,199,251
Interest and rents	511,184	491,439	531,186	559,546	539,846
Other assets	1,354,994	3,876,826	4,863,564	4,879,270	4,288,504
Totals, Assets	**51,652,213**	**60,615,055**	**66,983,515**	**67,351,039**	**63,363,094**
British Companies.					
Real estate	3,045,860	2,998,944	2,998,944	3,006,944	2,992,944
Loans on real estate	2,876,538	2,882,435	2,570,318	2,256,382	2,776,577
Stocks, bonds and debentures	40,732,091	41,684,149	43,887,793	46,793,525	46,630,770
Agents' balances and premiums outstanding	4,557,720	5,298,183	5,394,016	5,039,725	4,466,151
Cash on hand and in banks[1]	5,174,714	5,493,843	5,664,481	5,077,833	4,243,425
Interest and rents	333,437	330,155	329,998	323,866	299,431
Other assets in Canada	744,365	915,458	770,214	1,098,075	1,196,188
Totals, Assets in Canada	**57,464,725**	**59,603,167**	**61,615,764**	**63,596,350**	**62,605,486**

[1] Or deposited with the Government.

3.—Assets of Canadian Companies Selling Fire Insurance, or Fire Insurance and other classes of Insurance, and Assets in Canada of Companies other than Canadian Transacting such Business in Canada, 1927-31—concluded.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Foreign Companies.					
Real estate	–	–	–	–	–
Loans on real estate	13,000	23,000	13,000	13,000	13,000
Stocks, bonds and debentures	28,785,813	29,292,566	31,244,947	35,828,399	36,685,893
Agents' balances and premiums outstanding	2,908,472	3,439,315	3,428,161	3,534,565	3,404,319
Cash on hand and in banks[1]	5,491,382	6,022,316	7,014,035	5,730,878	6,101,626
Interest and rents	296,850	301,816	328,536	378,566	341,324
Other assets in Canada	77,159	110,305	133,228	187,056	270,017
Totals, Assets in Canada	**37,572,676**	**39,189,318**	**42,161,907**	**45,672,464**	**46,816,179**
All Companies.					
Real estate	6,258,956	5,826,616	5,424,229	5,518,502	5,504,487
Loans on real estate	7,113,121	6,398,055	5,813,122	4,047,467	4,524,804
Stocks, bonds and debentures	103,647,384	111,070,162	121,857,224	131,121,215	128,629,887
Agents' balances and premiums outstanding	11,270,092	12,898,857	13,094,242	12,962,442	11,645,969
Cash on hand and in banks[1]	15,082,072	17,187,851	17,615,642	15,543,848	15,544,302
Interest and rents	1,141,471	1,123,410	1,189,720	1,261,978	1,180,601
Other assets in Canada	2,176,518	4,902,589	5,767,006	6,164,401	5,754,709
Totals, Assets in Canada	**146,689,614**	**150,407,540**	**170,761,185**	**176,619,853**	**172,784,759**

[1] Or deposited with the Government.

4.—Liabilities of Canadian Companies Selling Fire Insurance, or Fire Insurance and other classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Canadian Companies.					
Unsettled losses	3,939,126	4,484,577	5,074,467	5,236,160	5,413,329
Reserve of unearned premiums	13,699,112	14,090,785	15,578,583	15,461,848	14,750,374
Sundry items	5,095,002	5,828,080	6,122,091	6,359,644	7,671,793
Totals, Liabilities, not including Capital	**22,733,240**	**24,403,442**	**26,775,141**	**27,057,652**	**27,835,496**
Excess of assets over liabilities, excluding capital	28,918,973	36,211,613	40,208,374	40,293,387	35,527,597
Capital stock paid up	15,003,316	17,020,855	17,304,479	17,383,197	17,787,337
British Companies.					
Unsettled losses	3,379,385	4,354,948	5,639,411	5.529,407	5,465,151
Reserve of unearned premiums	19,457,735	20,742,422	21,901,257	20,782,701	19,184,178
Sundry items	1,495,409	1,548,825	1,606,263	1,821,925	3,566,704
Totals, Liabilities in Canada	**24,332,529**	**26,616,195**	**29,146,931**	**28,134,033**	**28,216,033**
Excess of assets over liabilities, excluding capital	33,132,196	32,956,975	32,468,833	85,462,316	34,389,452
Capital stock paid up	–	–	–	–	–
Foreign Companies.					
Unsettled losses	1,176,847	1,589,302	2,161,713	2,303,806	2,140.705
Reserve of unearned premiums	12,182,168	12,811,246	13,509,480	13,254,976	13,183,442
Sundry items	855,414	901,078	950,737	996,381	1,048,678
Totals, Liabilities in Canada	**14,214,429**	**15,301,626**	**16,621,930**	**16,555,163**	**16,372,825**
Excess of assets over liabilities, excluding capital	23,358,248	23.887,692	25,538,977	29,117,300	30,443,354
Capital stock paid up	–	–	–	–	–
All Companies.					
Unsettled losses	8.495,358	10,428,827	12,875,591	13,069,373	13,019,185
Reserve of unearned premiums	45,339,015	47,644,453	50,989,320	49,499,525	47,117,994
Sundry items	7,445,825	8,277,983	8,679,091	9,177,950	12,287,175
Totals, Liabilities in Canada, not including Capital	**61,280,198**	**66,351,263**	**72,544,002**	**71,746,848**	**72,424,354**
Excess of assets over liabilities, excluding capital	85,409,417	93,056,280	98,216,184	154,873,003	100,360,403
Capital stock paid up[1]	15,003,316	17,020,855	17,304,479	17,383,197	17,787,337

[1] Canadian companies only.

5.—Income and Expenditure of Canadian Companies Selling Fire Insurance, or Fire Insurance and other classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
INCOME.	$	$	$	$	$
Canadian Companies.					
Net written premiums, Fire and other insurance	23,270,427	26,403,345	29,535,545	28,685,788	26,640,708
Interest and dividends earned	1,944,324	2,234,407	2,755,933	2,848,595	2,760,482
Sundry items	3,661,198	7,107,357	3,974,197	1,464,070	1,267,791
Totals, Income	**28,875,949**	**35,745,109**	**36,265,675**	**32,998,453**	**30,668,981**
British Companies.[1]					
Net cash for premiums	35,291,010	38,947,220	40,058,966	36,695,357	32,297,387
Interest and dividends on stocks, etc.	1,772,275	1,827,283	1,814,056	1,864,954	1,792,392
Sundry items	5,698	1,301	149	1,021	613
Totals, Income	**37,068,983**	**40,775,804**	**41,873,171**	**38,561,332**	**34,090,392**
Foreign Companies.[1]					
Net premiums written	24,146,575	26,483,893	26,186,699	25,194,339	23,023,408
Interest and dividends earned, etc.	1,425,276	1,484,347	1,426,353	1,538,774	1,470,804
Sundry items	149	3,330	6,147	1,985	3,995
Totals, Income	**25,572,000**	**27,971,570**	**27,619,199**	**26,735,098**	**24,498,207**
EXPENDITURE.					
Canadian Companies.					
Incurred for losses (Fire)	5,722,354	6,663,317	7,657,105	8,295,493	8,428,505
General expenses	6,032,664	7,971,270	8,121,625	8,796,488	9,322,508
On account of branches other than Fire or Life	10,312,567	11,924,618	13,585,866	14,333,965	14,390,806
Dividends or bonus to shareholders	1,193,634	1,292,586	1,491,558	1,480,357	3,244,089
Taxes	690,145	706,940	735,357	822,900	775,942
Totals, Expenditure	**23,953,781**[2]	**28,558,731**	**31,591,511**	**33,729,203**	**36,161,850**
Excess of income over expenditure	4,922,137	7,186,378	4,674,164	−730,750	−5,492,869
British Companies.[1]					
Incurred for losses (Fire)	10,095,057	12,067,465	14,237,389	13,608,322	13,131,973
General expenses	9,402,303	9,817,151	10,579,134	10,154,554	9,684.462
On account of branches other than Fire or Life	11,205,796	13,174,461	12,639,292	12,176,221	10,828,756
Taxes	1,178,706	1,256,920	917,127	953,010	908,673
Totals, Expenditure	**31,881,862**	**36,315,997**	**38,372,942**	**36,892,107**	**34,553,864**
Excess of income over expenditure	5,187,121	4,459,807	3,500,229	1,669,225	−463,472
Foreign Companies.[1]					
Incurred for losses (Fire)	7,910,486	9,673,734	11,459,589	11,943,324	11,757,919
General expenses	6,761,904	7,222,292	7,758,349	7,824,244	8,028,730
On account of branches other than Fire or Life	5,522,964	7,678,034	5,003,936	6,472,454	4,202,890
Taxes	883,216	920,976	743,442	724,449	735,956
Totals, Expenditure	**21,863,853**[3]	**25,495,036**[3]	**24,965,316**[3]	**26,964,471**[3]	**24,725,495**[3]
Excess of income over expenditure	3,708,147	2,476,534	2,653,883	−229,373	−227,288

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[1] Income and expenditure in Canada. [2] Includes $2,417 of profits returned to subscribers. [3] Includes several small amounts of profits aggregating $785,202 in 1927, $732,917 in 1928, $837,347 in 1929, $903,199 in 1930 and $877,281 in 1931 returned to subscribers.

6.—Amount of Net Premiums Written and Net Losses Incurred in Canada, by Provinces, by Canadian, British and Foreign Companies Transacting Fire Insurance Business, 1930 and 1931.

(Licensed re-insurance deducted.)

Province.	Canadian.		British.		Foreign.	
	Premiums.	Losses.	Premiums.	Losses.	Premiums.	Losses.
	$	$	$	$	$	$
1930.						
P.E. Island	41,077	12,441	164,297	61,588	78,890	47,568
Nova Scotia	426,883	213,094	930,672	422,953	886,290	443,416
New Brunswick	312,530	215,944	971,969	539,197	728,825	534,308
Quebec	2,356,429	1,459,004	5,835,801	3,731,087	5,229,699	3,267,135
Ontario	3,286,646	1,898,913	8,139,364	4,470,229	6,213,876	3,813,811
Manitoba	1,290,390	652,234	1,577,502	834,441	1,383,563	702,233
Saskatchewan	1,536,786	906,454	1,542,947	893,841	1,601,478	840,052
Alberta	999,218	627,874	1,697,249	873,843	1,759,674	927,133
British Columbia	941,772	487,754	2,771,402	1,776,044	2,180,837	1,373,565
Yukon	2,378	18,798	6,245	5,062	4,023	101
Totals[1]	**11,194,969**	**6,466,650**	**23,742,071**	**13,608,325**	**20,071,587**	**11,943,322**
1931.						
P.E. Island	39,323	49,734	155,490	197,308	73,851	88,302
Nova Scotia	411,645	231,573	878,294	526,367	856,220	625,819
New Brunswick	308,118	232,445	958,833	1,091,196	744,393	384,267
Quebec	2,394,424	1,498,614	5,513,767	3,324,813	5,260,895	3,228,464
Ontario	3,352,876	1,759,189	7,512,163	4,249,663	6,074,115	3,526,089
Manitoba	1,130,683	654,054	1,379,114	736,184	1,318,326	753,327
Saskatchewan	1,364,166	990,074	1,434,145	996,595	1,364,068	1,110,484
Alberta	966,714	519,903	1,547,134	889,254	1,515,857	1,015,713
British Columbia	856,570	441,543	2,133,724	1,120,387	2,017,159	1,063,768
Yukon	3,043	4	9,959	51	3,890	10
Totals[1]	**10,374,861**	**6,389,252**	**21,728,506**	**13,131,972**	**19,825,605**	**11,757,909**

[1] Totals include in many cases small items unapportioned by provinces.

Summary of Fire Insurance in Canada, 1931.—Of the total amount of fire insurance effected in Canada during each year, a part is sold by companies holding provincial licences and permits. Such companies generally confine their operations to the province of incorporation, but may be allowed to sell insurance in other provinces. The bulk of fire insurance business, however, is transacted by companies registered by the Dominion. Operations in 1931 are summarized in Table **7**.

7.—Dominion and Provincial Fire Insurance in Canada, 1931.

Item.	Net Insurance Written.	Net in Force at end of Year.	Net Premiums Received.	Net Losses Paid.
	$	$	$	$
1. Dominion Licensees	10,789,737,477	9,544,641,293	50,342,669	29,938,409
2. Provincial Licensees—				
(a) Provincial Companies within provinces by which they are incorporated	530,673,065	1,280,923,112	6,848,712	4,763,416
(b) Provincial Companies within provinces other than those by which they are incorporated	35,836,108	60,261,221	336,354	222,189
Totals, Provincial Licensees	566,509,173	1,341,184,333	7,185,066	4,985,605
Grand Totals	**11,356,246,650**	**10,885,825,626**	**57,527,735**	**34,924,014**

8.—Fire Insurance Carried on Property in Canada in 1929, under Section 129 of the Insurance Act, 1917, by Companies, Associations or Underwriters not Licensed to Transact Business in Canada.

(These statistics for 1929 will be found at p. 808 of the 1932 Year Book. See p. 926, paragraph 4 of this volume, *re* these statistics for 1930.)

Section 2.—Life Insurance.

Subsection I.—The Development of Life Insurance in Canada.[1]

Note.—The tables of mortality referred to in this article are designated by the symbols ordinarily used for that purpose. The significance of these symbols may be briefly stated as follows: Hm, Healthy Males Table of the Institute of Actuaries; Om, British Offices Males Table; Om (5), a table based on substantially the same data as the Om table, excluding the first five insurance years following medical examination of the life insured. Wherever a rate of interest is affixed to one of these symbols to designate basis of valuation, for example, Hm 4 p.c., the assumptions underlying the valuation are that the future mortality of the policyholders of the company will be the same as shown by the table of mortality, and that the rate of interest at which the reserve funds of the company will accumulate in the future will be the suffixed rate.

Life insurance business, introduced into Canada by companies from Great Britain and from the United States as a fairly well developed institution, and taken up almost as early along the same general lines by a native company, can hardly be said to have a distinctive Canadian history. The technique and practice show the effects of British and United States influences.

Among the first companies to transact life insurance business in Canada may be mentioned: Scottish Amicable (1846), Standard (1847), Canada (1847), Ætna (1850), Liverpool and London and Globe (1851) and Royal (1851). The late '60's and early '70's were stirring years in life insurance activities the world over. In England, the frenzied flotation of companies in this period gave rise to abuses which pointed to the necessity for some control over the formation and operation of companies. Statutes were passed in 1870, '71 and '72 embodying principles—"freedom and publicity"—which have, without fundamental change, since governed in life insurance legislation in Britain; in the year 1909 these same principles were extended and adapted to four kinds of insurance.

In Canada no fewer than fourteen companies began business in the early '70's, including four native companies, namely: Sun (incorporated 1865, began business 1871), Mutual of Canada (Ontario Mutual, 1870), Confederation (1871) and London (1874). By 1875 there were at least 26 companies and possibly several more, competing for the available business in Canada, as against 48 companies licensed by the Dominion, and a few provincial companies, in 1931. A comparison of the first and last lines in Table **9** is of interest in this connection.

Outline of Life Insurance Legislation.—The first Dominion Insurance Act was passed in 1868. It prohibited the transaction of insurance business by any company (except provincially incorporated companies transacting business within the province of incorporation) not licensed by the Minister of Finance. A deposit of $50,000 was required. Many of the provisions of this Act are traceable in the insurance legislation of the present day. Acts were passed in 1871, '74, '75 (consolidation, fire and inland marine and provision for appointment of Superintendent of Insurance under Minister of Finance); 1875 (extending powers of Superintendent to life and other companies); 1877 (consolidating the laws in respect of insurance, bases prescribed for computing claims of policyholders in an insolvent company, Superintendent to make quinquennial valuations on these bases); 1885 (dealing with commercial insurance companies transacting business on the so-called co-operative or mutual plan, being more commonly known as "assessment companies", fraternal societies being exempted from the Act); 1886 (consolidation); 1894 (life insurance in combination with any other insurance business forbidden, issue of annuities and endowment assurance by assessment companies prohibited, and new assessment companies required to procure at least 500 applications for membership before licence); 1895 (exempting certain fraternal organizations granting life, accident, sickness or disability insurance to members in hazardous occupations from application of Insurance Act); 1895 (certain amendments *re* foreign companies); 1899 (bases for quinquennial valuations by superintendent changed to Hm $3\frac{1}{2}$ p.c., applicable to business subsequent to Jan. 1, 1900, all earlier business to be brought up to Hm 4 p.c. basis by 1910, and Hm $3\frac{1}{2}$ p.c. by 1915); 1906 (consolidation); 1910 (quinquennial valuation basis changed to Om (5) $3\frac{1}{2}$ p.c. and many new provisions and restrictions enacted—some of the new provisions being standard provisions for life insurance policies—anti-rebating and anti-discrimination provisions, prescriptions concerning distribution of profits, separation of participating and non-participating accounts); 1917 (largely a new alignment believed to make the legislation *intra vires* within the terms of the Privy Council decision, 1915, in reference to sections 4 and 70 of the 1910 Act); 1919 (amendment affecting fraternal benefit societies); 1922 (in addition to some minor amendments defined several new classes of insurance, permitted life insurance companies to transact other classes of insurance business under specified conditions referred to in more detail below, authorized the issue of life policies including indemnity benefits in event of accident or sickness —payment not to exceed a weekly sum of $\frac{1}{2}$ p.c. of the amount assured—and an additional accidental death benefit not exceeding the sum assured, provided for the valuation of securities redeemable at a fixed date—if the market values should be "unduly depressed"—at values in excess of the market values but not higher than the values shown in the next preceding annual statement of the company, it also required approval by the Superintendent of agents soliciting applications for insurance but approval was to be deemed to have been given unless and until the company was advised to the contrary, all of which provisions except the so-called "licensing of agents" provision are to be found in the Acts of 1932 in substance); 1923 (policy conditions for automobile insurance); 1924 (provided that the market value of securities for annual statement purposes may be taken at a date to be fixed by the Superintendent of Insurance not more than 60 days before the date of statement, that life policies must contain a provision for payments thereunder to be made in Canadian money in Canada, that the expenses of the Department of Insurance incurred in the administration of the Insurance Act should be assessed on the premium income of insurance companies, all of which provisions—except that concerning payments under policies in Canadian currency—are included in the Acts of 1932 in principle); 1927 (fundamental changes in the policy valuation provisions, more particularly noted below); 1927 (consolidation); 1929 (enlarging the powers of fraternal benefit societies to include the issuance of endowment assurance contracts and the granting of non-forfeiture equities in policies).

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[1] Contributed by A. D. Watson, Actuary, Department of Insurance, Ottawa.

The legislation briefly noted above shows traces of the influence of British and of United States legislation. In many respects it may be said to be midway between the "freedom and publicity" legislation of England and the inquisitorial and restrictive legislation of the United States. Following the disclosures of the "Armstrong" investigation in New York, a Royal Commission was appointed in 1906 to inquire into the conduct of life insurance business in Canada; the recommendations of the Commission were in the main the same as of the "Armstrong Committee". Many of the recommendations, however, were not embodied in the legislation passed subsequent to the investigation. At the same time, there is a closer analogy between the Acts of 1910 and 1917 and certain United States Statutes passed in recent years than obtained between the insurance legislation of the two countries at any earlier period. Many of the new features introduced in the legislation of 1910 and subsequent years were repealed in 1932. It should not be supposed, however, that the legislation of 1932 was a reversion to the pre-1910 legislation; many provisions adopted in the Acts of 1910 and 1917, and the subsequent amendments, are incorporated in the Acts of 1932. Some of these are examined below in greater detail than was found convenient in the above summary.

By the Act of 1910, companies were authorized to include in life insurance policies provisions for waiver of premiums during total disability and, in event of total and permanent disability, to pay in full settlement of the policy an amount not exceeding the sum assured. In practice, on the occurrence of total and permanent disability, the sum assured was usually paid in equal instalments over 20 years rather than in one sum, the balance of the sum assured being payable in event of death within the 20 years. The 1917 Act permitted the payment of a total and permanent disability benefit equal to the amount of life insurance in the policy but without any reduction in the life insurance. Under this authority, the usual total and permanent disability benefit included in policies was a monthly annuity of 1 p.c. of the sum assured, payable until death or until maturity of the contract or until earlier recovery from disability. The value of this annuity on a life totally and permanently disabled is less than the sum assured and consequently the annuity benefit is within the total and permanent disability benefit authorized by the Amendment of 1917. In substance, the Acts of 1932 empower companies to include in life insurance policies the disability benefits authorized by the 1917 Amendment.

The inclusion of disability benefits in life insurance policies proved popular with the insuring public. A few years back, the great majority of policies issued included these benefits, which shows that this type of insurance protection was greatly appreciated. Unfortunately, the disability claims experience of companies became progressively worse from year to year and, during the last few years of the decade ended with 1930, threatened to get out of hand. As a consequence, companies have considerably reduced the disability benefits relative to the sum assured and have increased the scale of premiums, while at the same time they have increased the stringency of the claim conditions.

The 1919 Amendment to the Insurance Act 1917, affecting fraternal benefit societies, was an amendment of great significance. It is more convenient to deal with it in a later paragraph concerning the history of fraternalism.

One of the provisions of the 1922 Amendment, namely, the provision empowering life companies, incorporated by the Parliament of Canada, to transact other classes of business, is perhaps entitled to more lengthy notice than given on p. 938. In 1894 an Act was passed forbidding the transaction of life insurance business in combination with any other insurance business. This principle was reversed by the 1922 Amendment and confirmed by the Act of 1932, authorizing a life company, on passing a by-law confirmed by the members of the company and sanctioned by the Treasury Board, to engage in any and all other classes of insurance business, provided separate funds and accounts are maintained in respect of the life insurance business and in respect of the other classes of insurance business transacted. Before commencing any new classes of business, an initial fund is to be set up, the amount to be fixed by the Treasury Board, and to depend on the number and nature of the additional classes of business to be undertaken but not to be less than $50,000. For the purpose of setting up this initial fund, a life company may transfer thereto any amount to the credit of the shareholders' account in excess of paid-up capital and 25 p.c. but not exceeding $100,000 of the surplus in the life insurance fund, (allowance being made for contingent allotments and accrued dividends to policyholders). If any profit should be made on the additional classes of business, the life fund is to participate therein in the proportion of the amount so transferred from the life fund to the total amount transferred. Any fund so established may be liquidated under the Winding-up Act as though the company transacted no other class of business, and the capital stock of the company subscribed (paid and unpaid) before the date of the separation of funds is liable only in respect of the business transacted before the separation of funds.

In 1927 an important amendment was made to the Act of 1917 by which entirely new policy valuation provisions were enacted. In 1877 bases were prescribed for computing the claims of policyholders against an insolvent company, and the Superintendent of Insurance was required to make valuations quinquennially on these bases, presumably with a view to ensuring that companies should always maintain their assets at least equal to the amount of claims which might be made in a winding-up. In the course of the subsequent fifty years, the business of life insurance companies had become transformed almost out of recognition, and although there had been many amendments to the valuation bases and accretions, sometimes heterogeneous, to the valuation prescriptions, the valuation provisions in the Acts had not kept pace with business developments and practices. Likewise, in the course of years, the principles and the rationale of the legislation had become overlaid, confused, misunderstood or lost. In the circumstances, a fundamental reconstruction was long over-due; the reconstruction of 1927 was incorporated in the Acts of 1932 practically without change. For present purposes a brief summary of the main principles on which the new legislation was founded, without contrast in detail against the background of the earlier legislation, will suffice.

The object of the new valuation prescriptions is the computation of policy liabilities for annual statement purposes of companies. The prescriptions extend not only to the life insurance benefits but also to benefits dependent on disability, sickness, accident or on any other contingency which may, under the Acts, be included in a life insurance policy, and also to assurances dependent on a term certain. Maximum rates of interest are prescribed, being 3½ p.c. for assurances and 4 p.c. for annuities. All of the tables of mortality commonly in use by companies for computing premiums and reserves are authorized to be used in valuations but, if a company should find none of these tables appropriate for the valuation of any particular class of policies, the Act requires the company to make application to the Superintendent of Insurance for approval of a table deemed to be appropriate. Valuation methods are prescribed, but any other method a company deems appropriate may be used, subject to compliance with the methods prescribed. For deferred annuity contracts, the prescribed method is the net level premium method; for assurance contracts, a preliminary term method. If the net level premium for the life insurance benefits does not exceed the net level premium for a whole life policy, the method is the full preliminary term method. If the net level premium is in excess of the whole life premium, the valuation premium must be so computed as to make the same expense provision as of date of issue of the policy as is made in respect of whole life policies under the full preliminary term method. Whatever method of valuation may be used by any company, the Acts require that the reserve made in respect of the life insurance benefits, apart from any guaranteed values in the policy, shall not be less at any duration than the reserve made in accordance with the prescribed method and in addition "that the method used shall make adequate provision for the guaranteed values at the subsequent durations of the policy according to the rate of interest and the table of mortality used in the valuation". In respect of policy obligations dependent on contingencies other than life contingencies, "the bases and methods of valuation employed by the company shall be such as to place an adequate value on the liabilities thereunder", negative reserves excluded. The actuary of the company responsible for the valuation must certify that the reserves are not less than the reserves required by the provisions of the Act, and in addition "that in his opinion the reserves make a good and sufficient provision for all unmatured obligations of the company under the terms of its policies". Thus, compliance with the more or less technical provisions of the Act is not in itself sufficient to enable an actuary to give the required certificate; the valuation must, in his opinion, in the nature of things make a good and sufficient reserve for all unmatured policy obligations. If, in the opinion of the Superintendent of Insurance, the facts and circumstances do not justify the certificate given by the actuary, he may make a special valuation and if necessary change the reserve in the liabilities of the company. Once in every five years, or oftener at his discretion, the Superintendent is required to make a valuation on the bases and methods the company purports to use; but if he should be of the opinion that the valuation of the company does not comply with the Act, his valuation must, of course, remedy the defect. In lieu of making a valuation, he may examine the valuation made by the company. The above probably sufficiently states the main principles of the valuation provisions of the Acts for present purposes.

The legislation of 1932 was occasioned by the Privy Council decision of 1931, which held in effect that the Insurance Act was not properly framed, having regard to the competence of Parliament in that behalf. The Act was consequently repealed and three Acts were passed, namely, The Department of Insurance Act, The Canadian and British Insurance Companies Act, and The Foreign Insurance Companies Act, being respectively cc. 45, 46 and 47, 22-23 Geo. V. Presumably it was found more convenient, legislatively and otherwise, to have three Acts in place of one. From an examination of these Acts in comparison with the Consolidated Insurance Act, 1927, it would appear that every provision of that Act has been retained in the 1932 Acts which could be retained consistently with the views taken concerning the effect of Privy Council decisions up to the date of enactment. The legislative form and verbiage has, however, been greatly changed. Several important provisions, enacted in 1910 and subsequently conserved in the Acts of 1932, have already been briefly reviewed. In a broad and general way it may be said that the core of the 1932 legislation is that companies formed or incorporated outside of Canada may not transact business in Canada unless registered by the Minister of Finance, and, precedent to first registration, a company, whether Canadian, British, or foreign, must satisfy the Minister of its soundness, solvency and *bona fides*. Thereafter, a company must make full and complete annual returns of its business and affairs, submit to examination by the Superintendent of Insurance, and otherwise continue to satisfy the Minister of its soundness and solvency, and to comply with the Acts.

Group Insurance.—The above gives in brief outline the legislative framework under which the business of life insurance in Canada has developed. This development, as in other English-speaking countries at least, has been marked by an increased service to policyholders. Companies more and more seek to bring the benefits of insurance within the reach of an ever-widening *clientèle*. The introduction of "group insurance" nearly twenty years ago has brought the advantages of life insurance protection in a substantial way to large numbers who are generally not adequately protected. This is a plan of insurance under which each individual of a group of persons is insured under one policy, usually on the term plan. Very generally the lives insured in one group are employees of one employer, the employer paying the premiums or a substantial proportion thereof. Each employee has the right to obtain an individual policy at normal rates, without medical examination, on termination of employment. Under group insurance, the expenses are less than if individual policies were issued on each life in the usual way and consequently the premiums are lower. Although the plan as generally operated does not adequately take the place of regular insurance, it has proved of benefit to employees and other groups.

Industrial Insurance.—Another plan of insurance by which companies endeavour to fit the terms and conditions of policies to the circumstances of policyholders is "industrial life insurance", that is to say, the issue of policies of small amounts at weekly or monthly premiums paid to collectors or agents of the company who call at the home of the insured. This business is transacted in Canada along the same general lines as in other English-speaking countries. The unit premium is 5 cents per week, the sum assured, not the premium, varying with the age when the policy is issued. Children and the aged are alike insured. In some companies the business is written without any medical examination or inspection, other than inspection by the agent who procures the application or in some cases by a salaried official. In some other companies a simple medical examination is required for amounts of over, say, $300, but for smaller amounts applications are accepted from the agent as above, or the applicant may be required to appear before the medical examiner, but is not examined, as ordinarily understood. The amount of the individual policy is small and the total amount on any one life under several policies is usually not large. It, in fact, provides burial insurance for the poorer industrial classes, but there has been some extension of business on this plan to other classes. By reason of the frequent calls of the collectors and the small amount of each policy, a large proportion of the premiums is absorbed in expenses. The companies concerned have been devoting their energies to devising ways and means of reducing the expense ratio, and with success, thus making possible better returns to policyholders. For many years business has been transacted by four companies—one Canadian, two United States, and one Australian. The machinery and technique necessary for the transaction of this business differ materially from the machinery and technique of ordinary life insurance business.

Two other phases in the development of life insurance in Canada call for mention, namely, "assessmentism", as practised for a period by a few companies, and "fraternalism", as practised by friendly societies.

Assessmentism.—Assessmentism was an attempt to obtain life insurance protection at the lowest possible cost. In its cruder forms, the age of the individual insured was ignored, except that entrance was restricted to fairly early life; a uniform and usually low assessment was charged. There was provision in the contract for making additional assessments in certain contingencies—excessive deaths or reduction in funds of the company. It was held that as the means were thus at hand for meeting the exigencies of the business at any time, the companies were sound; and they seemed to be sound, even prosperous to those unable to see beneath the surface of things, so long as a large proportion of the lives assured were at the early ages, say under 40 or 45, where the rates of mortality are low and increase but slowly with the age. But, after a considerable proportion of lives insured had passed to middle and old age, the weaknesses of the system soon began to be disclosed. The "new blood" theory was then developed, which, stated in simple terms, meant that enough young lives were to be induced to insure to keep the average mortality of the company as a whole at a low rate, thus obviating the necessity for excessive assessments. These young lives, however, in turn grew old and thus the aged became too numerous to be off-set by "new blood"; assessments became frequent and consequently burdensome; healthy persons, especially the young, found they could get insurance much cheaper in ordinary companies and declined to pay the assessments. With their withdrawal, mortality, with no adequate reserves built up to draw upon, soon became unmanageable, and the final *débâcle* was in sight. It is impossible here to follow assessmentism through all its modifications in practice—merely attempts, perhaps generally honest enough in intention, to bolster up an unsound system. The first of these companies appeared in Canada in 1885 and the last disappeared about 1907. Legislation in respect of these companies required that they should represent the nature of their business correctly to the public. A deposit of $50,000 was obligatory; death benefits were to be a first charge on all assessments; each policy had to state that "the association is not required by law to maintain the reserve which is required of ordinary life insurance companies", and the words "assessment system" were required to be printed on every policy, application, circular, etc.

Fraternal Insurance.—Fraternal societies made their appearance in Canada at a very early date. So far as life insurance is concerned, the development is of more recent years, as in the case of old line life companies. They were at first exempt from the provisions of the Dominion Acts applicable to assessment companies. Notwithstanding the exemption, fundamentally the business and the methods of the two types of institution were fairly analogous as regards life insurance, though the machinery differed. Eventually, the provisions of the Statutes originally designed for assessment companies were applied to fraternal societies and continued to apply until the passing of the 1919 Amendment to the Insurance Act. The essential provisions of this amendment are embodied in the Acts of 1932. Thus the fate of fraternal benefit societies has been more fortunate than that of assessment companies. Although many of them have had to go through several readjustments of rates and benefits, which meant loss of membership and a temporary set-back, they have for many years been doing business with due regard for sound principles. Since 1919, these societies have been required to have an annual valuation made of each benefit fund by an actuary. Should a deficiency be disclosed as a result of the valuation, it must be made good within a reasonable period by an adjustment of rates or benefits. Thus societies are in no way in the dark as to their actual condition, and if any weakness should be disclosed the necessary remedy can be applied before anything in the nature of a serious situation arises. No bases or methods of valuation are prescribed; the actuary is expected to make his valuation having regard for all essential circumstances. It may be noted that an actuary performing valuations for a friendly society must be a fellow, by examination, of one or more of the following societies, namely, the Institute of Actuaries of Great Britain, the Faculty of Actuaries in Scotland, the Actuarial Society of America, or the American Institute of Actuaries.

Provincial Life Insurance Companies.—Any review of the development of the business of life insurance in Canada would not be complete without reference to the part played by the provinces. Insurance business transacted by provincial companies, more particularly life insurance business, has been relatively unimportant, but the legislation of the provinces with respect to contracts, insurable interest, beneficiaries, settlement of claims, agents, and other matters within the legislative domain of the provinces, has been of great importance both for insurers and the insuring public. Recognizing the great advantages of uniform laws throughout Canada, more than ten years ago the provinces appointed Commissioners to study the subject and to make recommendations. In respect of insurance the Conference of Commissioners recommended a "Uniform Bill" for enactment by the provinces. During the latter part of 1923 and the early part of 1924 the recommendations of the Conference of Commissioners were implemented by legislation in seven provinces—all except Nova Scotia and Quebec. In 1932 similar legislation was enacted by Nova Scotia. Thus, throughout the greater part of Canada, the insurance law has been uniform for nearly ten years. This is of great benefit both to insurers and to the insuring public and should contribute materially to the satisfactory and economical development of insurance business in the future.

Subsection 2.—Life Insurance Statistics.

Life insurance business was transacted in Canada in 1931 by 43 companies licensed by the Dominion, including 28 Canadian, 6 British and 9 foreign companies. In addition there were 6 British and 5 foreign companies licensed to write insurance but which had ceased to write new insurance, while 4 other British and 4 other foreign companies were authorized under the Act to transact business in connection with policies written prior to Mar. 31, 1878. One other foreign company was licensed to transact business in 1926, but has written no life insurance business in Canada except one group policy, written in 1928 but which lapsed before the close of the year. A foreign company, the Pan-American Life Insurance Company, was licensed during 1931 but transacted no Canadian business during that year.

As shown by the historical statistics of Table **9**, life insurance business in Canada has expanded from very small beginnings, the total net life insurance in force in all companies licensed by the Dominion in 1869 being only $35,680,082 while in 1932 it was $6,471,588,455[1], the amount per head of the estimated population of Canada having nearly doubled since 1920—an evidence of the general recognition of the value of life insurance for the adequate protection of dependants against misfortune. Notable also from these historical statistics is the fact that in this field the British companies, which were the leaders in 1869, have fallen far behind the

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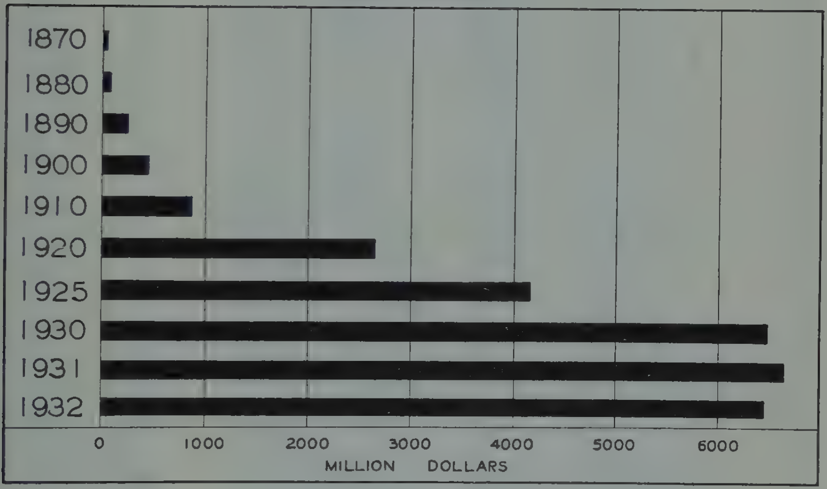
[1] Preliminary figures. This total does not include $175,845,857 of fraternal insurance.

Canadian and the foreign companies. The total net amount of new insurance effected during the year 1931 was $782,716,064, as compared with $884,749,748 in 1930, $978,141,485 in 1929, $918,742,064 in 1928, $838,475,057 in 1927 and $797,940,009 in 1926, while the premiums paid were $225,100,571, as compared with $220,523,727 in 1930, $210,728,479 in 1929, $192,945,783 in 1928, $173,732,359 in 1927 and $159,872,965 in 1926.[1]

The following diagram shows the rapid increase of life insurance in force in companies licensed by the Dominion between 1870 and 1931. Preliminary figures for 1932 show a decrease of $150,679,338 in the year.

LIFE INSURANCE IN FORCE IN CANADA
1870 - 1932
DOMINION COMPANIES



In Table **10** detailed statistics are given of the business of Canadian, British and foreign companies, respectively, by companies, in 1931, while Table **11** is a summary showing the business of Canadian, British and foreign companies for the past 5 years. Table **12** shows the ordinary and industrial policies in force and effected during the year ended Dec. 31, 1931. Table **13** gives the insurance death-rate by classes of companies, and Tables **14**, **15** and **16** show, respectively, the assets, liabilities, cash income and expenditure of Canadian and other life insurance companies for the years 1927-31. Statistics of Dominion fraternal insurance are given in Table **17** and of Dominion and provincial insurance combined in Table **18**, which shows that on Dec. 31, 1931, the total life insurance in force in Canada was $7,008,008,333.

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[1] In 1932 the new insurance effected was $654,425,266 and the total of net insurance premiums paid was $216,133,010, according to preliminary figures.

9.—Life Insurance In Force and Effected in Canada, calendar years, 1869-1932.[1]

Year.	Net Amount in Force				Insurance In Force per Head of Estimated Population.[3]	Net Amount of New Insurance Effected during Year.
	Canadian Companies.	British Companies.	Foreign Companies.	Total.		
	$	$	$	$	$	$
1869	5,476,358	16,318,475	13,885,249	35,680,082	10·01	12,854,132
1870	6,404,437	17,391,922	18,898,353	42,694,712	11·78	12,194,696
1871	8,711,111	18,405,325	18,709,499	45,825,935	12·42	13,332,626
1872	13,070,811	19,258,166	34,905,707	67,234,684	17·91	21,070,101
1873	15,777,197	18,862,191	42,861,508	77,500,896	20·26	21,053,618
1874	19,634,319	19,863,867	46,218,139	85,716,325	22·01	19,108,221
1875	21,957,296	19,455,607	43,596,361	85,009,264	21·50	15,074,258
1876	24,649,284	18,873,173	40,728,461	84,250,918	21·02	13,890,127
1877	26,870,224	19,349,204	39,468,475	85,687,903	21·08	13,534,667
1878	28,656,556	20,078,533	36,016,848	84,751,937	20·57	12,169,755
1879	33,246,543	19,410,829	33,616,330	86,273,702	20·62	11,354,224
1880	37,838,518	19,789,863	33,643,745	91,272,126	21·45	13,906,887
1881	46,041,591	20,983,092	36,266,249	103,290,932	23·88	17,618,011
1882	53,855,051	22,329,368	38,857,629	115,042,048	26·30	20,112,755
1883	59,213,609	23,511,712	41,471,554	124,196,875	28·04	21,572,960
1884	66,519,958	24,317,172	44,616,596	135,453,726	30·19	23,303,412
1885	74,591,139	25,930,272	49,440,735	149,962,146	33·05	26,767,488
1886	88,181,859	27,225,607	55,908,230	171,315,696	37·41	34,800,598
1887	101,796,754	28,163,329	61,734,187	191,694,270	41·44	37,381,810
1888	114,034,279	30,003,210	67,724,094	211,761,583	45·27	40,923,529
1889	125,125,692	30,488,618	76,349,392	231,963,702	49·05	43,912,187
1890	135,218,990	31,613,730	81,591,847	248,424,567	51·98	39,802,956
1891	143,368,817	32,407,937	85,698,475	261,745,229	54·16	37,609,287
1892	154,709,077	33,692,706	90,708,482	279,110,265	57·16	44,062,440
1893	167,475,872	33,543,884	94,602,966	295,622,722	59·95	44,802,847
1894	177,511,846	33,911,885	96,737,705	308,161,436	61·89	49,111,010
1895	188,326,057	34,341,172	96,590,352	319,257,581	63·52	44,101,898
1896	195,303,042	34,837,448	97,660,009	327,800,499	64·60	42,293,322
1897	208,655,459	35,293,134	100,063,684	344,012,277	67·16	47,710,165
1898	226,209,636	36,606,195	105,708,154	368,523,985	71·21	54,387,303
1899	252,201,516	38,025,948	113,943,209	404,170,673	77·21	66,184,063
1900	267,151,086	39,485,344	124,433,416	431,069,846	81·32	67,729,115
1901	284,684,621	40,216,186	138,868,227	463,769,034	86·35	72,854,859
1902	308,202,596	41,556,245	159,053,464	508,812,305	92·61	79,638,914
1903	335,638,940	42,127,260	170,676,800	548,443,000	97·05	90,732,415
1904	364,640,166	42,608,738	180,631,886	587,880,790	100·89	97,617,402
1905	397,946,902	43,809,211	188,578,127	630,334,240	105·02	104,719,585
1906	420,864,847	45,655,951	189,740,102	656,260,900	106·46	93,722,510
1907	450,573,724	46,462,314	188,487,447	685,523,485	106·93	88,784,250
1908	480,266,931	46,161,957	193,087,126	719,516,014	108·61	98,644,410
1909	515,415,437	46,985,192	217,956,351	780,356,980	114·76	130,122,008
1910	565,667,110	47,816,775	242,629,174	856,113,059	122·51	150,785,305
1911	626,770,154	50,919,675	272,530,942	950,220,771	131·85	173,341,738
1912	706,656,117	54,537,725	309,114,827	1,070,308,669	144·85	212,772,151
1913	750,637,902	58,176,795	359,775,330	1,168,590,027	153·12	225,606,787
1914	794,520,423	60,770,658	386,869,397	1,242,160,478	157·65	212,977,464
1915	829,972,809	58,087,018	423,556,850	1,311,616,677	164·34	218,205,427
1916	895,528,435	59,151,931	467,499,266	1,422,179,632	177·75	227,210,162
1917	996,699,282	58,617,506	529,725,775	1,585,042,563	196·66	277,532,095
1918	1,105,503,447	60,296,113	619,261,713	1,785,061,273	219·08	307,279,759
1919	1,362,631,562	66,908,064	758,297,691	2,187,837,317	263·25	517,863,639
1920	1,664,348,605	76,883,090	915,793,798	2,657,025,493	310·55	630,110,900
1921	1,860,026,952	84,940,938	989,875,958	2,934,843,848	333·96	514,654,111
1922	2,013,722,848	93,791,180	1,063,874,968	3,171,388,996	355·58	502,279,333
1923	2,187,434,147	98,023,020	1,148,051,506	3,433,508,673	381·03	548,640,800
1924	2,413,853,480	103,519,236	1,246,623,756	3,763,996,472	411·64	615,372,723
1925	2,672,989,676	108,565,248	1,377,464,924	4,159,019,848	447·44	712,091,889
1926	2,979,946,768	111,375,336	1,518,874,230	4,610,196,334	487·65	797,940,009
1927	3,277,050,348	113,883,716	1,653,474,770	5,044,408,834	523·44	838,475,057
1928	3,671,325,188	115,340,577	1,820,979,858	5,607,645,623	570·16	918,742,064
1929	4,051,612,499	116,545,637	1,989,104,071	6,157,262,207	613·94	978,141,485
1930	4,319,370,209	117,410,860	2,055,502,125	6,492,283,194	636·00	884,749,748
1931	4,409,707,938	119,262,511	2,093,297,344	6,622,267,793	638·17	782,716,064
1932[2]	4,311,747,690	115,818,730	2,044,022,035	6,471,588,455	615·98	654,425,266

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[1] Figures do not include insurance in force and effected by Fraternal Societies operating under Dominion charters. The amount of insurance in force in such societies amounted to $175,845,857 in 1932 according to preliminary figures. Corresponding figures for the years 1927–31 are given in Table **17**, pp. 953-954.

[2] Preliminary figures.

[3] For estimates of populations upon which these figures are based see p. 145.

10.—Life Insurance In Force and Effected in Canada, by Companies, 1931.

Company.	Policies Effected.		Policies in Force.		Net Premium Income.	Net Amount of Policies become Claims.[1]
	No.	Net Amount.	No.	Net Amount.		
Canadian Companies—		$		$	$	$
Canada	11,383	37,839,929	136,688	435,965,719	13,638,255	4,969,459
Capital	1,279	2,385,305	11,186	19,220,585	529,542	99,555
Columbia	93	127,088	306	433,248	10,561	–
Commercial	746	1,154,613	4,888	10,454,083	340,322	37,472
Confederation	11,118	25,645,024	109,663	224,350,927	7,896,478	1,981,009
Continental	2,236	4,106,119	22,812	37,213,475	1,213,590	304,267
Crown	4.998	12,437,591	50,304	106,202,860	3,277,098	836,013
Dominion	5,810	16,230,985	60,166	134,493,332	4,611,355	966,654
Dominion of Canada	662	1,114,165	3,974	6,720,819	202,566	40,944
T. Eaton	1,567	3,379,557	12,189	24,368,537	884,106	85,742
Excelsior	4,827	10,345,640	47,088	91,037,306	2,898,370	725,699
Great West	17,436	40,463,098	235,566	529,122,310	17,900,297	3,820,192
Imperial	7,000	18,718,344	90,775	221,259,994	7,952,872	1,950,143
London	118,211	93,573,775	534,252	461,153,418	13,626,710	2,452,186
Manufacturers'	12,851	28,162,635	134,109	280,631,853	9,377,095	2,360,446
Maritime	559	1,207,835	3,249	6,659,768	154,104	39,085
Monarch	3,167	5,849,500	32,093	58,895,035	1,638,332	272,212
Montreal	3,185	7,622,257	17,964	35,920,721	1,128,564	259,738
Mutual of Canada	15,805	45,205,605	199,752	471,837,026	17,840,552	4,011,944
National of Canada	3,109	6,766,009	27,433	54,815,392	1,692,055	399,261
North American	5,708	16,881,532	81,346	170,975,424	5,972,410	1,632,283
Northern	3,362	4,441,572	33,270	51,582,405	1,692,053	460,037
Royal Guardians	1,304	719,297	7,183	4,087,183	139,831	53,162
Saskatchewan	594	918,656	6,908	10,358,542	283,722	27,500
Sauvegarde	2,516	3,563,024	20,378	28,769,584	860,795	222,052
Sovereign	999	2,205,607	13,678	26,425,904	824,785	119,107
Sun	32,571	99,007,502	288,869	898,020,533	29,194,778	7,632,604
Western	849	1,268,600	5,251	8,731,955	209,711	26,950
Totals	**273,945**	**491,340,864**	**2,191,340**	**4,409,707,938**	**145,999,909**	**35,785,716**
British Companies—						
Commercial Union[2]	–	–	93	410,022	8,910	2,756
Edinburgh[2]	–	–	2	3,037	19	–
Gresham[2]	–	–	1,202	2,557,184	83,039	42,509
Life Association of Scotland[2]	–	–	20	37,630	19	8,722
Liverpool and London and Globe[2]	–	–	95	173,046	4,375	8,562
London and Scottish	483	1,115,848	7,184	16,559,719	623,337	488,013
Mutual Life and Citizens (Australia)	13,359	5,908,806	110,485	34,227,709	1,272,408	224,965
North British and Mercantile[2]	–	–	283	1,156,307	42,379	16,373
Norwich Union[2]	–	–	37	46,908	923	2,624
Phœnix of London	47	166,500	1,749	6,578,011	176,344	173,291
Prudential of London	569	2,569,780	686	2,906,506	112,870	–
Royal	347	1,834,641	5,689	24,265,450	763,122	380,538
Scottish Amicable[2]	–	–	4	7,165	115	1,083
Scottish Provident[2]	–	–	1	2,589	31	–
Standard	640	2,140,107	10,651	30,281,355	863,506	584,855
Star[2]	–	–	28	49,873	651	1,614
Totals	**15,445**	**13,735,682**	**138,209**	**119,262,511**	**3,952,048**	**1,935,905**
Foreign Companies—						
Ætna	1,187	6,109,150	16,031	89,648,010	1,981,745	1,186,151
Connecticut General	–	–	–	–	–	–
Connecticut Mutual[2]	–	–	1	2,000	65	1,000
Equitable	7	23,400	8,704	24,222,115	733,717	561,019
Guardian	3	37,250	41	204,002	8,117	1,000
Metropolitan	334,244	157,994,143	2,781,599	1,035,946,051	39,208,886	7,093,470
Mutual of New York	1,951	5,649,107	29,941	80,427,258	2,808,319	1,091,613
National of United States[2]	–	–	9	3,517	–	–
New York	4,816	10,863,700	84,789	193,263,276	6,735,733	1,990,287
Northwestern Mutual[2]	–	–	12	11,919	31	3,103
Occidental	188	840,200	3,968	9,132,943	206,255	106,030
Pan-American	–	–	–	–	–	–
Phœnix Mutual[2]	–	–	47	26,242	251	2,126
Provident Savings[2]	–	–	210	317,362	6,334	5,450
Prudential	244,730	83,160,698	1,485,759	515,385,837	19,945,563	3,316,420
State	10	172,160	264	1,380,418	20,686	31,623
Travelers of Hartford	2,273	12,332,560	28,202	135,368,449	3,236,680	1,079,585
Union Labour	22	59,000	27	78,500	1,535	–
Union Mutual	144	365,650	3,037	7,216,135	244,297	189,591
United States	12	32,500	223	663,310	19,400	30,500
Totals	**589,587**	**277,639,518**	**4,442,864**	**2,093,297,344**	**75,157,614**	**16,688,968**

[1] Including matured endowments.

[2] Ceased transacting new business in Canada.

10.—Life Insurance in Force and Effected in Canada, by Companies, 1931—concluded.

Company.	Policies Effected.		Policies in Force.		Net Premium Income.	Net Amount of Policies become Claims.[1]
	No.	Net Amount.	No.	Net Amount.		
		$		$	$	$
SUMMARY.						
Canadian companies	273,945	491,340,864	2,191,340	4,409,707,938	145,990,909	35,785,716
British companies	15,445	13,735,682	138,209	119,262,511	3,952,048	1,935,905
Foreign companies	589,587	277,639,518	4,442,864	2,093,297,344	75,157,614	16,688,968
Grand Totals	**878,977**	**782,716,064**	**6,772,413**	**6,622,267,793**	**225,100,571**	**54,410,589**

[1]Including matured endowments.

11.—Progress of Life Insurance in Canada, calendar years, 1927-31.

Item.		1927.	1928.	1929.	1930.	1931
Canadian Companies[1]—						
Policies effected	No.	297,883	317,735	329,989	308,490	273,945
Policies in force at end of year	"	1,816,796	1,960,429	2,098,282	2,173,363	2,191,340
Policies become claims	"	17,484	19,854	22,608	22,721	20,396
Net amount of policies effected	$	544,385,411	606,902,108	645,201,646	594,704,790	491,340,864
Net amount of policies in force	$	3,277,050,348	3,671,325,188	4,051,612,499	4,319,370,209	4,409,707,938
Net amount of policies become claims	$	22,642,370	26,192,910	31,788,773	34,803,687	35,785,716
Amount of premiums in year	$	111,644,539	124,654,036	137,319,487	142,059,595	145,990,909
Claims paid[2]	$	23,193,977	25,270,528	33,221,451	36,017,299	36,994,531
Unsettled claims—						
Not resisted	$	2,038,459	3,426,966	2,871,841	3,297,337	4,164,333
Resisted	$	92,684	109,120	54,017	54,211	92,641
British Companies—						
Policies effected	No.	34,335	20,359	16,709	14,536	15,445
Policies in force at end of year	No.	134,145	134,250	137,803	138,007	138,209
Policies become claims	"	1,456	1,502	1,467	1,377	1,329
Net amount of policies effected	$	15,414,004	12,312,500	11,138,775	10,769,103	13,735,682
Net amount of policies in force	$	113,883,716	115,340,577	116,545,637	117,410,860	119,262,511
Net amount of policies become claims	$	2,033,571	2,111,035	2,217,823	1,963,563	1,935,905
Amount of premiums in year	$	3,963,695	4,036,669	4,000,064	4,924,980	3,952,048
Claims paid[2]	$	1,867,679	2,095,434	2,030,705	2,074,962	1,854,214
Unsettled claims—						
Not resisted	$	262,875	220,166	381,383	224,187	316,545
Resisted	$	–	–	–	–	–
Foreign Companies—						
Policies effected	No.	582,645	613,851	615,481	548,578	589,587
Policies in force at end of year	"	3,934,511	4,162,450	4,364,004	4,422,273	4,442,864
Policies become claims	"	41,573	43,178	47,553	44,029	41,109
Net amount of policies effected	$	278,675,642	299,527,456	321,801,064	279,275,855	277,639,518
Net amount of policies in force	$	1,653,474,770	1,820,979,858	1,989,104,071	2,055,502,125	2,093,297,344
Net amount of policies become claims	$	11,889,499	13,384,031	15,272,011	15,859,124	16,688,968
Amount of premiums in year	$	58,124,125	64,255,078	69,408,928	73,539,152	75,157,614
Claims paid[2]	$	12,307,558	13,707,461	16,042,494	16,777,780	17,730,613
Unsettled claims—						
Not resisted	$	861,498	1,173,636	971,364	850,456	1,166,436
Resisted	$	59,493	61,774	53,491	114,473	115,242
All Companies—						
Policies effected	No.	914,863	951,945	962,179	871,604	878,977
Policies in force at end of year	"	5,885,452	6,257,129	6,600,089	6,733,643	6,772,413
Policies become claims	"	60,513	64,534	71,628	67,677	62,834
Net amount of policies effected	$	838,475,057	918,742,064	978,141,485	884,749,748	782,716,064
Net amount of policies in force	$	5,044,408,834	5,607,645,623	6,157,262,207	6,492,283,194	6,622,267,793
Net amount of policies become claims	$	36,565,440	41,687,976	49,278,607	52,626,374	54,410,589
Amount of premiums in year	$	173,732,359	192,945,783	210,728,479	220,523,727	225,100,571
Claims paid[2]	$	37,369,214	41,073,423	51,294,650	54,870,041	56,579,358
Unsettled claims—						
Not resisted	$	3,162,832	4,820,768	4,224,588	4,371,980	5,647,314
Resisted	$	152,177	170,894	107,508	168,684	207,883

[1]Figures of Canadian business only.
[2]Death claims, matured endowments and disability claims.

12.—Ordinary and Industrial Life Insurance Policies in Force and Issued in Canada, 1931.

Type of Policy by Nationality of Company.	Newly Issued.			In Force.		
	Number.	Total Amount.	Average Amount of a Policy.	Number.	Total Amount.	Average Amount of a Policy.
		$	$		$	$
ORDINARY POLICIES—						
Canadian companies	186,254	481,615,205	2,586	1,761,623	4,052,845,990	2,301
British companies	4,400	11,860,648	2,696	40,917	106,982,769	2,615
Foreign companies	112,987	192,121,438	1,700	722,367	1,281,127,567	1,774
All Companies	**303,641**	**685,597,291**	**2,258**	**2,524,907**	**5,440,956,326**	**2,155**
INDUSTRIAL POLICIES—						
Canadian companies	106,969	52,491,723	491	427,866	157,164,605	367
British companies	11,532	3,384,626	293	97,292	15,994,916	164
Foreign companies	490,782	107,076,254	218	3,720,084	672,067,243	181
All Companies	**609,283**	**162,952,603**	**267**	**4,245,242**	**845,226,764**	**199**

13.—Insurance Death-Rates in Canada, 1928-31.

NOTE.—Average death-rate of insured persons for all companies in the 26 years 1901-26 was 8·9 per 1000.

Type of Insurer.	1928.			1929.		
	Number of Policies Exposed to Risk.	Number of Policies Terminated by Death.	Death-rate per 1,000.	Number of Policies Exposed to Risk.	Number of Policies Terminated by Death.	Death-rate per 1,000.
All companies, ordinary	2,122,065	11,849	5·6	2,282,497	13,796	6·0
All companies, industrial	3,970,847	30,301	7·6	4,167,146	31,947	7·7
Fraternal benefit societies	221,269	3,106	14·0	220,450	3,195	14·5
Totals	**6,341,181**	**45,256**	**7·2**	**6,670,093**	**48,938**	**7·3**
	1930.			1931.		
All companies, ordinary	2,408,286	13,777	5·7	2,510,889	14,365	5·7
All companies, industrial	4,279,895	31,365	7·3	4,261,714	29,275	6·9
Fraternal benefit societies	223,816	3,158	14·1	219,418	3,134	14·3
Totals	**6,911,997**	**48,300**	**7·0**	**6,992,021**	**46,774**	**6·7**

14.—Assets of Canadian Life Companies and Assets in Canada of Life Companies other than Canadian Companies, 1927-31.

NOTE.—Certain British companies transacting fire insurance in Canada transact also life insurance in Canada, and inasmuch as a separation of assets has not been made between these two classes, their assets in Canada are not included here, but are included in the assets of British companies shown in Table 3 on p. 933.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Canadian Companies—					
Real estate	27,415,468	29,876,943	34,939,006	47,165,903	53,819,137
Real estate held under agreements of sale	–	–	–	14,269,209	11,698,617
Loans on real estate	253,125,752	294,818,250	327,211,037	338,122,114	345,431,316
Loans on collaterals	299,688	424,816	5,148,478	820,811	295,013
Policy loans	141,288,436	162,797,279	195,566,166	229,108,632	267,576,694
Stocks, bonds and debentures	559,199,065	655,692,366	733,077,513	785,905,290	860,467,536
Interest and rent due and accrued	18,274,594	19,480,258	21,921,633	25,818,997	29,489,244
Cash on hand and in banks	7,243,364	7,467,221	6,325,633	18,764,106	13,273,995
Outstanding and deferred premiums	28,000,731	33,632,762	38,809,327	46,289,991	49,426,002
Other assets	1,662,406	2,227,526	3,299,825	3,598,119	2,995,016
Totals, Assets[1]	**1,036,509,504**	**1,206,417,421**	**1,366,298,618**	**1,509,863,172**	**1,634,472,570**
British Companies—					
Real estate	860,166	870,156	769,670	724,117	738,249
Real estate held under agreements of sale	–	–	–	58,704	78,931
Loans on real estate	13,298,285	13,548,137	12,986,877	12,501,381	12,283,851
Loans on collaterals	863	1,738	76,613	2,741	12,331
Policy loans	3,638,475	3,846,694	3,985,632	4,136,916	4,698,574
Stocks, bonds and debentures	32,207,849	32,667,057	32,121,391	36,912,816	38,579,807
Interest and rent due and accrued	446,074	464,776	502,247	583,919	629,823
Cash on hand and in banks	694,806	564,376	815,090	860,221	671,698
Outstanding and deferred premiums	514,772	522,352	536,879	534,847	562,484
Other assets	45,899	50,043	58,543	141,706	183,390
Totals, Assets in Canada	**51,707,189**	**52,535,329**	**51,852,942**	**56,457,368**	**58,439,138**
Foreign Companies—					
Real estate	2,766,911	2,484,145	2,378,116	2,448,397	2,399,011
Real estate held under agreements of sale	–	–	–	11,701	–
Loans on real estate	23,790,383	23,479,295	23,416,508	30,488,337	31,191,807
Loans on collaterals	–	–	–	–	–
Policy loans	26,932,123	30,993,628	37,035,100	43,325,671	50,847,585
Stocks, bonds and debentures	219,994,393	242,229,061	267,489,395	311,786,613	331,352,030
Interest and rent due and accrued	3,511,835	3,989,880	4,549,393	5,330,201	5,742,800
Cash on hand and in banks	3,896,179	4,396,656	4,660,803	5,757,270	7,179,661
Outstanding and deferred premiums	5,587,692	6,834,900	7,168,453	8,380,578	8,906,278
Other assets	46,632	9,333	767,079	10,344	6,043
Totals, Assets in Canada	**286,526,148**	**314,416,898**	**348,464,847**	**407,539,112**	**437,625,215**

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[1] The figures in the table give the book values; the authorized values of these assets were $1,077,501,770 in 1927, $1,251,326,900 in 1928, $1,414,783,529 in 1929, $1,511,411,068 in 1930 and $1,611,093,987 in 1931.

15.—Liabilities of Canadian Life Companies and Liabilities in Canada of Life Companies other than Canadian Companies, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
Canadian Companies—					
Unsettled claims	8,438,251	10,095,887	9,957,894	10,994,745	12,227,216
Net re-insurance reserve	870,467,629	1,008,797,408	1,140,615,583	1,259,253,948	1,363,738,458
Sundry liabilities	120,126,568	141,842,787	164,778,155	169,337,563	182,738,585
Totals, Liabilities, not including Capital	**998,942,448**	**1,160,736,082**	**1,315,351,632**	**1,439,586,256**	**1,558,704,259**
Surplus of assets, excluding capital	78,559,322	90,590,818	99,431,897	71,824,812	52,389,728
Capital stock paid up	8,450,152	10,090,760	10,736,558	11,140,654	10,946,497
British Companies[1]—					
Unsettled claims	262,875	220,166	381,384	224,188	316,545
Net re-insurance reserve	29,402,171	30,818,854	31,496,050	32,861,364	33,618,926
Sundry liabilities	336,505	396,065	339,041	444,118	1,562,586
Totals, Liabilities, not including Capital[1]	**30,001,551**	**31,435,085**	**32,216,475**	**33,529,670**	**35,498,057**
Surplus of assets	21,759,750	21,152,250	19,688,473	22,979,884	23,001,461
Foreign Companies[1]—					
Unsettled claims	920,991	1,235,410	1,024,856	964,929	1,281,677
Net re-insurance reserve	243,876,209	273,244,841	303,264,419	331,104,374	352,485,637
Sundry liabilities	14,020,362	15,880,498	17,358,608	18,949,502	20,047,887
Totals, Liabilities, not including Capital[1]	**258,817,562**	**290,360,749**	**321,647,883**	**351,018,805**	**373,815,201**
Surplus of assets	27,708,586	24,056,149	26,816,964	56,520,307	63,810,014

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[1] Liabilities in Canada.

16.—Principal Items of Cash Income and Expenditure of Canadian Life Companies, and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
	$	$	$	$	$
INCOME.					
Canadian Companies[1]—					
Net premium income	189,773,972	219,695,507	258,392,082	273,381,096	289,968,212
Consideration for annuities	10,948,053	27,775,296	21,904,175	24,816,263	30,943,652
Interest, dividends and rents	56,917,760	65,761,754	74,076,246	78,424,368	77,191,229
Sundry items	16,000,473	20,239,177	32,496,340	28,746,973	31,252,614
Totals, Cash Income[1]	**273,640,258**	**333,471,734**	**386,868,843**	**405,368,700**	**429,355,707**
British Companies[2]—					
Net premium income	3,963,694	4,036,669	4,000,064	4,927,869	3,954,937
Consideration for annuities	–	–	–	7,857	93,058
Interest, dividends and rents	2,375,046	2,354,269	2,260,650	2,319,073	2,432,176
Sundry items	105,346	223,150	57,484	68,420	90,128
Totals, Cash Income[2]	**6,444,086**	**6,614,088**	**6,318,148**	**7,323,219**	**6,570,299**
Foreign Companies[2]—					
Net premium income	58,124,125	64,255,078	69,408,928	73,539,152	75,157,614
Consideration for annuities	217,076	221,904	401,236	403,889	488,235
Interest, dividends and rents	13,477,158	15,468,627	17,396,145	20,290,992	23,034,373
Sundry items	1,882,648	1,775,089	2,083,815	2,249,119	2,338,618
Totals, Cash Income[2]	**73,701,007**	**81,720,698**	**89,290,124**	**96,483,152**	**101,018,840**

For footnotes see end of table, p. 952.

16.—Total Cash Income and Expenditure of Canadian Life Companies, and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1927-31—concluded.

Item.	1927.	1928.	1929.	1930.	1931.
EXPENDITURE.	$	$	$	$	$
Canadian Companies[1]—					
Payments to policyholders	102,211,905	118,287,824	152,626,413	177,179,476	203,011,738
General expenses	52,662,089	60,837,059	71,784,899	77,271,147	72,011.435
Dividends to stockholders	1,532,455	1,904,225	2,515,406	3,022,993	2,148,144
Other disbursements	3,998,698	5,819,197	8,813,307	12,775,135	19,202,852
Totals, Expenditure[1]	**160,405,147**	**186,848,305**	**235,740,625**	**270,248,751**	**296,374,169**
Excess of income over expenditure	113,235,111	146,623,429	151,128,818	135,119,949	132,981.538
British Companies[2]—					
Payments to policyholders	2,771,207	3,107,238	3,393,542	4,402,299	3,511,983
General expenses	1,099,852	985,677	971,130	984.147	1,085,483
Other disbursements	60,076	87,622	50,990	38,679	57,100
Totals, Expenditure[2]	**3,931,135**	**4,180,537**	**4,415,662**	**5,425,125**	**4,654,566**
Excess of income over expenditure	2,512,951	2,433,551	1,902,486	1,898,094	1,915,733
Foreign Companies[2]—					
Payments to policyholders	27,724,692	29,067,298	34,304,593	40,277,675	48,233,349
General expenses	13,901,431	14,638,186	15,597,059	15,474,742	14,970,837
Other disbursements	778,209	1,520,389	1,806,954	2,092,437	2,165,686
Totals, Expenditure[2]	**41,494,332**	**45,225,873**	**51,708,606**	**57,844,854**	**65,369,872**
Excess of income over expenditure	32,296,675	36,494,825	37,581,518	38,638,298	35,648,968

[1] Includes income or expenditure on business outside of Canada. [2] Income or expenditure in Canada.

Life Insurance Effected through Fraternal Benefit Societies.—In addition to life insurance, some fraternal benefit societies grant other insurance benefits to members, notably sickness benefits, but these are relatively unimportant. Table **17** gives statistics of life insurance effected through fraternal benefit societies on Canadian members, together with statistics of assets, liabilities, income and expenditure relating to the whole business of Canadian societies and to the business in Canada of foreign societies. The rates charged by these societies are computed to be sufficient to provide the benefit granted, having regard for actuarial principles. Each benefit fund of every society must be valued annually by a qualified actuary (Fellow by examination of the Institute of Actuaries, London; of the Faculty of Actuaries in Scotland; of the Actuarial Society of America; or of the American Institute of Actuaries), and unless the actuary certifies to the solvency of each fund a readjustment of rates or benefits must be made. The statistics in the first part of this table relate to the Canadian societies reporting to the Insurance Department of the Dominion Government, which numbered 8 in 1931, *viz.*, Alliance Nationale, Ancient Order of Foresters, Artisans Canadiens-Français, Canadian Woodmen of the World, Catholic Mutual Benefit Association, Commercial Travellers' Association of Canada, Independent Order of Foresters and Grand Orange Lodge of British America.

Under an amendment to the Insurance Act, effective Jan. 1, 1920, all foreign fraternal benefit societies were requested to obtain Dominion authority precedent to transacting business in Canada, but any such societies which at that date were transacting business under provincial licences, while forbidden to accept new members, were permitted to continue all necessary transactions in respect of the insurance of their then members. Most of these societies have since obtained Dominion authority to transact business, also some foreign societies which had not previously been licensed by the provinces. Of both classes of societies, 24 transacted business in Canada in 1931, *viz.*, Aid Association for Lutherans, Association Canado-Américaine, Brotherhood of American Yeomen, Catholic Order of Foresters, Expressmen's Mutual Benefit Association, First Catholic Slovak Union, Jewish National Workers' Alliance, Knights of Columbus, Ladies' Catholic Benevolent Association, Lutheran Brotherhood, Lutheran Mutual Aid Society, Maccabees, Modern Woodmen of America, National Fraternal Society of the Deaf, National Slovak Society of U.S.A., Royal Arcanum, Royal Clan (Order of Scottish Clans), Slovene National Benefit Society, Sons of Norway, United Commercial Travelers of America (accident business only), Verhovay Aid Association, Women's Benefit Association, Women's Catholic Order of Foresters, Workmen's Circle.

17.—Statistics of Fraternal Benefit Societies' Insurance, 1927-31.

Item.	1927.	1928.	1929.	1930.	1931.
CANADIAN SOCIETIES. (Life Insurance in Canada.)					
Number of certificates effected	15,475	18,857	20,079	14,598	12,793
Number of certificates become claims	3,146	3,521	3,250	3,320	3,150
	$	$	$	$	$
Amount paid by members	3,104,177	2,984,515	2,981,508	2,907,347	2,938,267
Amount of certificates effected	13,867,269	15,896,261	15,095,645	11,255,675	9,599,293
Net amount in force	135,093,703	136,421,265	136,107,164	129,852,173	127,947,418
Amount of certificates become claims	2,658,332	2,941,605	2,776,499	2,847,823	2,706,332
Benefits paid	3,188,977	3,169,951	3,213,574	3,376,260	3,278,621
Unsettled claims—					
Not resisted	160,652	192,374	227,555	196,006	221,466
Resisted	1,000	2,000	-	-	4,000
Amount terminated by—					
Death	2,004,914	2,180,196	2,227,415	2,173,822	2,112,390
Surrender, expiry, lapse, etc	15,435,133	15,689,299	17,172,287	16,216,935	15,207,149
Totals, Terminated	17,440,047	17,869,495	19,399,702	18,390,757	17,319,539
Assets (whole business)—					
Real estate	1,905,763	2,154,998	2,141,627	2,175,663	4,854,070
Loans on real estate	14,523,005	15,994,461	17,205,743	17,897,910	22,317,457
Policy loans	10,581,935	10,198,992	9,959,596	9,892,340	9,894,384
Stocks, bonds and debentures	32,746,864	33,964,330	35,363,109	36,495,997	40,273,777
Cash on hand and in banks	942,491	930,342	857,160	728,528	733,819
Interest and rent due and accrued	780,986	824,885	849,206	885,435	995,524
Dues from members	279,384	272,608	275,843	284,242	383,124
Other assets	3,403,796	2,925,253	2,712,074	2,609,696	2,716,965
Totals, Assets[1]	**65,164,224**	**67,265,869**	**69,364,358**	**70,969,811**	**82,169,120**
Liabilities (whole business)—					
Claims, unsettled	225,026	275,268	298,934	248,754	287,548
Reserves	60,059,878	61,005,846	61,578,374	62,062,212	71,063,568
Other liabilities	1,949,650	2,093,745	2,023,571	2,150,987	3,123,118
Totals, Liabilities	**62,234,554**	**63,374,859**	**63,900,879**	**64,461,953**	**74,474,234**
Income (whole business)—					
Assessments	6,014,340	6,041,199	5,795,297	5,585,562	5,543,026
Fees and dues	527,875	543,487	536,441	516,238	496,290
Interest and rents	3,254,759	3,378,298	3,455,537	3,551,694	3,588,780
Other receipts	145,063	198,129	79,557	70,334	119,290
Totals, Income	**9,942,037**	**10,161,113**	**9,866,832**	**9,723,828**	**9,747,386**
Expenditure (whole business)—					
Paid to members	5,817,002	5,795,082	5,987,451	6,058,918	5,961,192
General expenses	1,626,786	1,487,104	1,518,668	1,428,655	1,722,926
Other expenditure	160,726	208,097	180,896	148,894	96,176
Totals, Expenditures	**7,604,514**	**7,490,283**	**7,687,015**	**7,636,467**	**7,780,294**
Excess of income over expenditure	2,337,523	2,670,830	2,179,817	2,087,361	1,967,092

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[1] The figures given are the book values: the authorized values of these assets were: $66,864,489 in 1927, $68,275,989 in 1928, $69,410,022 in 1929, $71,510,045 in 1930 and $82,195,624 in 1931.

17.—Statistics of Fraternal Benefit Societies' Insurance, 1927-31—concluded.

Item.	1927.	1928.	1929.	1930.	1931.
FOREIGN SOCIETIES. (Life Insurance in Canada.)					
Number of certificates effected	5,392	5,328	4,965	4,315	5,766
Number of certificates become claims	735	741	786	868	886
	$	$	$	$	$
Amount paid by members	1,102,829	973,144	1,061,584	1,065,271	1,105,412
Amount of certificates effected	7,045,512	5,843,865	5,396,175	4,709,995	5,883,799
Net amount in force	56,961,015	49,908,304	51,921,366	55,436,601	55,698,821
Amount of certificates become claims	816,036	752,052	808,840	920,161	871,560
Benefits paid	809,321	756,424	812,695	899,186	867,624
Unsettled claims—					
Not resisted	89,339	78,308	91,688	79,680	80,656
Resisted	–	–	–	–	917
Amount terminated by—					
Death	727,272	678,684	733,671	746,679	733,006
Surrender, expiry, lapse, etc	7,538,906	4,383,537	5,095,397	5,070,780	5,727.668
Totals, Terminated	8,266,178	5,062,221	5,829,068	5,817,459	6,460,674
Assets (Canadian business)—					
Real estate	–	–	–	–	–
Loans on real estate	–	–	–	4,500	6,275
Policy loans	12,497	23,884	45,505	97,606	178,365
Stocks, bonds and debentures	1,804.502	1,887,847	2,225,355	2,533,842	2,699,294
Cash on hand and in banks	285,298	235,948	355,104	162,313	346,654
Interest and rent due and accrued	23,203	26,405	30,323	31,683	34,624
Dues from members	56,739	78,151	72,204	77,524	113,365
Other assets	36	69	468	–	503
Totals, Assets	**2,182,275**	**2,252,304**	**2,728,959**	**2,907,468**	**3,379,080**
Liabilities (Canadian business)—					
Claims unsettled	94,749	83,257	97,704	90,889	109,398
Reserves	6,506,723	6,859,496	7,376,121	7,967,836	8,227,310
Other liabilities	115,245	21,345	15,173	18,515	23,100
Totals, Liabilities	**6,716,717**	**6,964,098**	**7,488,998**	**8,077,240**	**8,359,808**
Income (Canadian business)—					
Assessments	1,181,180	1,051,521	1,146,134	1,174,686	1,217,118
Fees and dues	309,534	289,455	273,525	281,461	279,914
Interest and rents	94,557	118,740	123,814	128,549	111,514
Other receipts	5,387	5,912	8,115	7,819	6,581
Totals, Income	**1,590,658**	**1,465,628**	**1,551,588**	**1,592,515**	**1,615,127**
Expenditure (Canadian business)—					
Paid to members	885,530	813,334	894,513	1,008,530	981,857
General expenses	199,536	184,559	171,383	185,820	196,802
Other expenditure	5,501	5,791	6,646	6,830	7,391
Totals, Expenditure	**1,090,567**	**1,003,684**	**1,072,542**	**1,201,180**	**1,186,050**
Excess of income over expenditure	500,091	461,944	479,046	391,335	429,077

Summary of Life Insurance in Canada, 1931.—In addition to the business transacted by life insurance companies registered by the Dominion, a considerable volume of business is also transacted by companies licensed by the provinces. Statistics of these provincial companies have been collected since 1915 by the Department of Insurance. Table 18, showing policies effected and in force, premiums received and losses paid, in Canada in 1931, summarizes the volume of business done by both life companies and fraternal societies, whether registered by the Dominion or licensed by the provinces.

18.—Dominion and Provincial Life Insurance in Canada, 1931.

Business Transacted by—	New Policies Effected (net).	Net In Force Dec. 31.	Net Premiums Received.	Net Claims Paid.
	$	$	$	$
1. Dominion Licensees—				
(a) Life insurance companies	782,716,064	6,622,267,793	225,100,571	56,579,358
(b) Fraternals	15,483,092	183,646,239	4,043,679	3,603,259
Totals for Dominion Companies	**798,199,156**	**6,805,914,032**	**229,144,250**	**60,182,617**
2. Provincial Licensees—				
(a) Provincial companies within provinces by which they are incorporated—				
(1) Life companies	10,245,318	70,276,981	1,941,612	674,451
(2) Fraternals	2,332,761	55,943,291	1,429,988	1,038,448
(b) Provincial companies in provinces other than those by which they are incorporated—				
(1) Life companies	7,827,264	34,240,945	962,345	358,179
(2) Fraternals	3,493,579	41,633,084	844,670	532,375
Totals for Provincial Companies	**23,898,922**	**202,094,301**	**5,178,615**	**2,603,453**
Grand Totals	**822,098,078**	**7,008,008,333**	**234,322,865**	**62,786,070**

Section 3.—Miscellaneous Insurance.

Since 1875 the growth of insurance business other than fire and life has been steady. The report of the Superintendent of Insurance for the calendar year 1880 shows that the number of companies licensed for the transaction of accident, guarantee, plate glass and steam boiler insurance—the only four classes of miscellaneous insurance then transacted—was 5, 3, 1 and 1 respectively. The report for the year 1931 shows that miscellaneous insurance in Canada now includes: accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock sickness, steam boiler, title, tornado, weather insurance, etc. In 1880 10 companies transacted business of the miscellaneous kind, but in 1931 such insurance was sold by 251 companies, of which 53 were Canadian, 59 British and 139 foreign; 180 of these 251 companies also transacted fire insurance. In addition, 18 fraternal orders or societies carried on sickness insurance as well as life insurance business.

Accident Insurance.—The first licence of this kind was issued to the Travelers' Co., of Hartford, Conn., in 1868. The first licence to a Canadian company was issued to the Accident Insurance Co. of Canada, which was organized in 1872 and commenced business in 1874. Much accident insurance has also been sold by companies doing primarily a life insurance business. Seventy-two companies transacted accident insurance in 1931.

Automobile Insurance.—This is now one of the most important branches of the miscellaneous class of insurance. Premiums increased from $80,446 in 1910 to $573,604 in 1915 and to $18,260,176 in 1930; for 1931 they were $16,825,020, showing a decrease of 8 p.c. for the year. There has been an increase in the number of companies from 7 to 162 during the 21-year period.

Plate Glass Insurance.—Policies were first sold in Canada by the Metropolitan Plate Glass Insurance Co., a United States' concern, which withdrew from Canada during 1882 to avoid business restrictions. The 73 companies operating in Canada in 1931 received premiums of $585,437 and incurred claims of $249,715, compared with premiums of $553,842 and claims of $268,924 for 1930.

Burglary Insurance.—In 1893 only one company issued burglary policies. A second followed in 1905, and in 1910 5 companies were operating, while 68 companies sold this type of insurance during 1931. The premium income of these companies amounted in 1931 to $1,344,134 and the losses incurred amounted to $462,633.

Hail Insurance.—Insurance against hailstorms is a class of business of comparatively recent development in Canada. During the year 1931, 42 companies undertook this class of risk, the premiums written amounting to $573,997 and the losses incurred to $480,377. The total premiums for the 22 years during which this business has been carried on in Canada amounted to $65,022,607 and the total losses paid to $45,126,625.

19.—Insurance other than Fire and Life in Canada, 1931.[1]

Type of Insurance.	Premiums Received.	Losses Incurred.	Unsettled Claims.	
			Not Resisted.	Resisted.
	$	$	$	$
Guarantee (fidelity)	1,341,335	638,765	374,195	31,267
Guarantee (surety)	1,016,746	347.858	274,160	70,451
Personal accident	3,220,031	1,648,921	553,988	14,325
Personal accident and sickness	1,826,873	1,099,968	237,144	500
Employers' liability and workmen's compensation	2.116,028	1,330,033	2,152,067	7,628
Other accident insurance	1,590,995	711,017	440,542	35,332
Sickness	1,690,089	1,127,209	344,821	1,495
Burglary	1,344,134	462,633	92,822	1,050
Steam boiler	543,957	20,752	20,115	–
Hail	573,997	480,377	554	–
Inland transportation	1,024,336	334,019	63,427	1,590
Plate glass	585,437	249,715	24,296	–
Automobile	16,825,020	9,786,185	3,965,507	272,439
Live-stock	35,191	35,410	2,665	500
Tornado	169,354	81,559	4,501	–
Earthquake	10,233	–	–	–
Forgery	36,480	22,245	1,930	62,084
Rain	10,949	4,575	182	–
Credit	309,925	269,730	120,940	1,000
Electrical machinery	197,838	43,403	13,580	–
Fraud	31,148	13,841	–	–
Aviation	86,537	231,027	26,739	7,000

[1] Dominion licensees only.

20.—Income and Expenditure, and Assets and Liabilities of Canadian Companies doing only Insurance Business other than Fire and Life, 1931.

Company.	Income.	Expenditure.	Excess of Income over Expenditure.	Assets.	Liabilities.[1]	Excess of Assets over Liabilities.
	$	$	$	$	$	$
Boiler Inspection	405,447	357,949	47,498	1,006,192	459,640	546,553
Chartered Trust	361,638	349,735	11,904	3,768,847[2]	2,618,714	1,150,133
Confederation Life	17,540	9,731	7,809	98,139	4,063	94,076
Fidelity Insurance	255,921	268,609	−12,687	482,774	178,868	303,905
T. Eaton General	22,133	3,806	18,327	172,438	2,050	170,388
Guarantee Co. of North America	618,049	590,031	28,018	4,283,253	1,106,985	3,176,268
London Life	182,152	164,132	18,019	156,850	56,840	100,009
Merchants' Casualty	337,723	327,817	9,905	361,256	215.850	145,406
North American Accident	111,279	71,506	39,773	418,840	39,659	379,180
Protective Association	433,727	422,256	11,471	331,855	149,267	182,588
Royal Guardians	3,205	2,636	569	21,125	8,788	12,338
Totals	**2,748,814**	**2,568,208**	**180,606**	**11,101,569**	**4,840,724**	**6,260,844**

[1] Not including capital stock. [2] Including $644,461 loans on collateral.

21.—Income and Expenditure in Canada of Companies, other than Canadian, doing only Insurance Business other than Fire and Life, 1931.

Company.	Income.			Expenditure.			Excess of Income over Expenditure.
	Premiums.	Interest and Dividends Earned.	Total Income.	Net Losses Incurred.	General Expenditure.	Total Expenditure.	
	$	$	$	$	$	$	$
Abeille	3,131	4,817	7,948	3,670	1,728	5,398	2,550
Aero Indemnity	14,542	1,126	15,668	—2,738	6,678	3,940	11,728
Aero Insurance	28,924	2,735	31,659	12,962	11,241	24,203	7,456
Ætna Casualty	28,374	5.362	58,262	10,657	23,029	33,686	24,577
Ætna Life	30,404	5,295	35,721	18,877	6,014	24,891	10,830
Alliance Casualty	None	None	None	None	None	None	None
American and Foreign	3,053	250	3,303	None	2,255	2,255	1,048
American Automobile Fire	254,865	456	255,321	110,913	113,694	224,607	30,714
American Automobile	570,459	1,417	571,876	379,746	231,907	611,653	—39,777
American Credit	183,955	2,832	186,862	142,800	73,651	216,451	—29,589
American Surety	73,029	5,918	78,947	11,016	22,808	33,824	45,123
Bankers' Indemnity	—1,620	6,000	4,380	3,587	—52	3,535	845
British and Foreign	None	5,990	5,990	None	206	206	5,783
Central West Casualty	7,583	2,078	9,661	2,063	3,449	5,512	4,149
Century Indemnity	53,167	14,800	67,967	32,954	27,273	60,227	7,740
Connecticut General	None	2,125	2,125	None	None	None	2,125
Constitution Indemnity	178	1,980	2,158	2,599	89	2,687	—529
Continental Casualty	646,026	25,534	671,560	350,347	317.063	667,410	4,150
Employers' Reinsurance	204,225	7,250	211,475	81,980	72,976	154,956	56,519
Fidelity and Casualty	6,033	12,798	18,831	5,338	3,030	8,369	10,462
Fireman's Fund Indemnity	14.532	2.000	16,532	2,234	3,506	5,740	10,792
General Casualty of America	251,742	11,320	263,062	124,787	97,751	222.538	40,524
General Casualty of Paris	233,160	18,344	251,504	153,039	129,844	282,883	—31,379
General Exchange	390,138	19,850	410,179	226,432	72,511	298,943	111,235
General Indemnity	1,247	999	2,603	None	1,668	1,668	935
General Reinsurance	None	7,250	7,250	None	336	336	6,914
Great American Indemnity	94,486	None	94,486	3,963	30,167	34,129	60,357
Hartford Accident	195,982	15,063	211,046	85,753	86,947	172,700	38,346
Hartford Live Stock	20,478	3,288	23,766	18,377	10,000	28,377	—4,611
Hartford Steam Boiler	12,495	2,500	14,995	None	2,421	2,421	12,574
Home Indemnity	55,293	11,016	66,309	20,713	16,469	37,182	29,127
Indemnity Insurance Co.	131,281	17,326	148,607	58,277	73,693	131,970	16,637
International Fidelity	5,314	None	5,314	2,071	704	2,775	2,539
Lloyd's Casualty	254,472	16,363	270,835	132,242	121,245	253,487	17,348
Loyal Protective	298,225	6,670	304,895	191,325	109,388	300,713	4,182
Lumbermen's Mutual Casualty	365,175	10,813	375,988	166,530	180,176	346,706	29,282
Maryland Casualty	433,406	33,055	466,461	185,758	208,265	394,023	72,438
Metropolitan Casualty	98,061	24,058	122,119	50,756	62,804	113,560	8,559
Metropolitan Life	591.068	17,150	608,218	409,982	143,603	553,584	54,634
Monarch Accident	89,591	2,568	92,159	55,866	30,207	86,073	6,086
National Surety	358,286	24,065	384,188	267,762	156,277	424,039	—39,851
National Union Indemnity	56,905	10,313	67,218	113,835	42,850	156,685	—89,467
New York Casualty	6,370	11,612	17,982	7,980	21,009	28,989	—11,007
New York Indemnity	16,403	None	16,807	9,162	31,660	40,822	—24,015
Northwest Casualty	19,639	2,002	21,641	14,304	6,270	20,574	1,067
Occidental Life	None	2,885	2,885	None	None	None	2,885
Ocean Marine	None	None	None	None	None	None	None
Preferred Accident	71,464	10,056	81,520	38,527	46,218	84,745	—3,225
Prudential Insurance	6,447	None	6,447	2,008	2,470	4,479	1,968
St. Paul-Mercury	35,156	2,537	37,693	30,865	13,873	44,738	—7,045
Standard Marine	384	500	884	None	67	67	817
Tornado Inter-Insurance	2,702	495	3,197	None	852	852	2,345
Transportation	6,209	None	6,209	8,187	2,733	10.920	—4,711
Travelers' Indemnity	637,501	34,222	671,723	353,565	312,955	666,520	5,203
Travelers' Insurance	1,020,778	58,363	1,079,141	575,600	459,248	1,034,848	44,293
Union Indemnity	182,404	6,720	189,563	53,289	77,033	130,322	59,241
United States Casualty	None	None	None	None	None	None	None
United States Fidelity	970,174	51,800	1,021,974	420,007	480,960	900,967	121,007
United States Guarantee	1,049	1,127	2,176	None	1,553	1,553	623
Zurich	413,015	28,628	441,643	190,339	218,440	408,779	32,864
Totals	**9,447,360**	**573,721**	**10,048,933**	**5,140,306**	**4,173,212**	**9,313,517**	**735,415**

22.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1931.

NET PREMIUMS RECEIVED.

Class of Business.	Dominion Licensees.	Provincial Licensees.			Grand Total.
		(a) Prov. Cos. within Provinces by which they are Incorp.	(b) Prov. Cos. in Provinces other than those by which they are Incorp.	Total Provincial Licensees.	
	$	$	$	$	$
Accident (1) Personal	3,220,031	3,873	124	3,997	3,224,028
(2) Employers' liability and workmen's compensation	2,116,028	604,916	418,625	1,023,541	3,139,569
(3) Other	1,590,995	32,388	1,944	34,332	1,625,327
Accident and sickness combined	1,826,873	122,433	75,860	198,293	2,025,166
Automobile	16,825,020	637,962	207,313	845,275	17,670,295
Aviation	86,537	–	–	–	86,537
Burglary	1,344,134	28,429	11,160	39,589	1,383,723
Credit	309,925	–	–	–	309,925
Earthquake	10,233	–	–	–	10,233
Electrical machinery	197,838	–	–	–	197,838
Forgery	36,480	–	–	–	36,480
Fraud	31,148	–	–	–	31,148
Guarantee (fidelity)	1,341,335	60,481[1]	30,411[1]	90,892[1]	2,448,973[1]
Guarantee (surety)	1,016,746				
Hail	573,997	77,277	–	77,277	651,274
Inland transportation	1,024,336	6,008	594	6,602	1,030,938
Live-stock	35,191	–	–	–	35,191
Plate glass	585,437	59,893	3,803	63,696	649,133
Rain	10,949	–	–	–	10,949
Sickness	1,690,089	2,759	–	2,759	1,692,848
Sprinkler[2]	8,669	–	–	–	8,669
Steam boiler	543,957	–	–	–	543,957
Title	–	–	–	–	–
Tornado	169,354	–	–	–	169,354
Weather	–	35,050	–	35,050	35,050
Totals	**34,595,302**	**1,671,469**	**749,834**	**2,421,303**[3]	**37,016,605**[3]

NET LOSSES INCURRED.

Class of Business.	Dominion Licensees.	(a) Prov. Cos. within Provinces by which they are Incorp.	(b) Prov. Cos. in Provinces other than those by which they are Incorp.	Total Provincial Licensees.	Grand Total.
Accident (1) Personal	1,648,921	2,205	153	2,358	1,651,279
(2) Employers' liability and workmen's compensation	1,330,033	383,322	344,196	727,518	2,057,551
(3) Other	711,017	7,111	777	7,888	718,905
Accident and sickness combined	1,099,968	51,005	29,394	80,399	1,180,367
Automobile	9,786,185	371,894	130,154	502,048	10,288,233
Aviation	231,027	–	–	–	231,027
Burglary	462,633	15,473	2,173	17,646	480,279
Credit	269,730	–	–	–	269,730
Earthquake	–	–	–	–	–
Electrical machinery	43,403	–	–	–	43,403
Forgery	22,245	–	–	–	22,245
Fraud	13,841	–	–	–	13,841
Guarantee (fidelity)	638,765	22,832[1]	18,720[1]	41,552[1]	1,028,175[1]
Guarantee (surety)	347,858				
Hail	480,377	10,922	–	10,922	491,299
Inland transportation	334,019	2,676	–	2,676	336,695
Live-stock	35,410	–	–	–	35,410
Plate glass	249,715	27,851	2,492	30,343	280,058
Rain	4,575	–	–	–	4,575
Sickness	1,127,209	2,453	–	2,453	1,129,662
Sprinkler[2]	903	–	–	–	903
Steam boiler	20,752	–	–	–	20,752
Title	–	–	–	–	–
Tornado	81,559	–	–	–	81,559
Weather	–	11,754	–	11,754	11,754
Totals	**18,940,145**	**909,498**	**528,059**	**1,437,557**[4]	**20,377,702**[4]

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[1] Provincial companies did not furnish a separation of guarantee figures.

[2] This business was transacted by a company not holding a licence to transact fire insurance.

[3] Excluding $1,736,201 premiums of Fraternal Benefit Societies for Accident, Sickness and Funeral business.

[4] Excluding $934,694 losses of Fraternal Benefit Societies for Accident, Sickness and Funeral business.

Section 4.—Government Annuities.

In the early years of the 20th century, there arose throughout the civilized world a distinct movement in favour of ameliorating the living conditions of the less well-off members of society. One form which this movement took in the United Kingdom was that of old age pensions, granted by the State as a gift to its poorer citizens, whose earnings were very generally insufficient to permit of a margin of saving. In Canada, where wages were higher and a margin of saving was possible, the movement at first took the form of providing, by establishing Government annuities, an absolutely safe investment for such savings, which had only too often been lost through the inexperience of their owners, leaving the latter a burden upon the charity of relatives or of the public.[1] The cost of administering those annuities is borne by the Dominion Government.

Under the Government Annuities Act (Chapter 7, R.S.C., 1927, amended by c. 33, R.S.C., 1931), His Majesty the King, represented by the Minister (at present the Minister of Labour), may sell to persons over the age of 5 years, domiciled or resident in Canada, immediate or deferred annuities of not less than $10 nor more than $1,200 (1) for the life of the annuitant, (2) for a term of years certain, not exceeding 20 years, or for the life of the annuitant, whichever period shall be the longer, or (3) to any two persons domiciled in Canada during their joint lives, and with or without continuation to the survivor. The property and interest of any annuitant in any contract for an annuity is neither transferable nor attachable. The purchaser may contract that, in the event of the death of the annuitant before the date fixed for the annuity to begin, all money paid shall be refunded to the purchaser or his legal representatives with interest at the rate of 4 p.c. compounded yearly.

From Sept. 1, 1908, the date of the inception of the Annuities Branch, up to and inclusive of Mar. 31, 1932, the total number of annuity contracts issued was 15,019. Of these contracts, 1,746 have been cancelled, leaving in force on Mar. 31, 1932, 13,273 contracts. The total amount of purchase money received during the same period was $32,666,706. Table **23** gives the details of annuities contracted for and purchase money received from 1909 to 1932, by years.

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[1] A Dominion-Provincial non-contributory scheme of old age pensions, providing for the payment, to persons 70 years and over, of pensions not exceeding $20 per month, contributed by the Dominion and the provinces which became parties to the scheme, was enacted by chapter 35 of the Dominion Statutes of 1927. The system is now in effect in British Columbia, Manitoba, Saskatchewan, Alberta, Ontario and the Northwest Territories. For further particulars, see pp. 780-782.

23.—Government Annuities Contracted for, and Purchase Money Received, fiscal years ended Mar. 31, 1909-32.

Fiscal Years.	Contracts.	Purchase Money Received.
	No.	$
1909[1]	66	50,391
1910	566	434,491
1911	1,069	393,441
1912	1,032	441,601
1913	373	417,136
1914	318	390,887
1915	264	314,765
1916	325	441,696
1917	285	432,272
1918	187	332,792
1919	147	322,154
1920	204	408,719
1921	195	531,800
1922	277	748,160
1923	339	1,028,353
1924	409	1,458,819
1925	486	1,606,822
1926	668	1,938,921
1927	503	1,894,885
1928	1,223	3,843,088
1929	1,328	4,272,419
1930	1,257	3,156,475
1931	1,772	3,612,234
1932	1,726	4,194,384
Totals	**15,019**	**32,666,706**

[1] Seven months.

Statistics of the Annuities Fund and value of all contracts issued are given in Tables **24** and **25**. From Sept. 1, 1908 to Mar. 31, 1932, 15,019 annuities had been issued. On Mar. 31, 1932, 5,254 immediate annuities and 8,019 deferred annuities were in force. The total value of these annuities on that date was $26,871,979 and the amount of annuities purchased was $5,477,596.

24.—Government Annuities Fund Statement, fiscal years ended Mar. 31, 1929-32.

Item.	1929.	1930.	1931.	1932.
	$	$	$	$
ASSETS.				
Fund at beginning of year	14,719,484	18,369,100	20,612,250	23,306,954
Receipts during the year, less payments	3,649,616	2,243,150	2,694,704	3,275,576
Fund at end of year	18,369,100	20,612,250	23,306,954	26,582,530
LIABILITIES.				
Net present value of all outstanding contracts	18,335,193	20,720,895	23,568,894	26,871,979
RECEIPTS.				
For Immediate Annuities	3,607,110	2,484,818	2,650,506	3,047,079
For Deferred Annuities	673,274	682,887	992,843	1,191,070
Interest on Fund	638,889	757,393	843,374	979,883
Refunds	1,056	184	1,679	905
For amount transferred to maintain Reserve	132,844	-	108,644	261,939
Totals	**5,053,173**	**3,925,282**	**4,597,046**	**5,480,876**
PAYMENTS.				
Annuities paid under Immediate Contracts	1,368,542	1,646,699	1,849,413	2,122,108
Return of Premiums with interest	27,051	24,203	22,795	39,427
Return of Premiums without interest	7,965	11,230	30,133	43,766
Balance at end of year	3,649,615	2,243,150	2,694,705	3,275,576
Totals	**5,053,173**	**3,925,282**	**4,597,046**	**5,480,876**

25.—Valuation, on Mar. 31, 1931 and 1932, of Annuity Contracts Issued pursuant to the Government Annuities Act, 1998.

Description of Contract.	1931.			1932.		
	Number.	Amount of Annuities.	Total Value on Mar. 31, 1931, of Annuities Purchased.	Number.	Amount of Annuities.	Total Value on Mar. 31, 1931, of Annuities Purchased.
		$	$		$	$
1—Immediate Annuities	2,830	1,282,175	10,313,299	3,212	1,412,566	11,406,687
2—Immediate Guaranteed	1,101	368,054	3,754,671	1,295	434,253	4,477,352
3—Immediate Last Survivor	630	332,931	3,705,453	747	386,652	4,315,406
4—Deferred Annuities	7,220	2,683,347	5,795,471	8,019	3,244,124	6,672,534
Totals	**11,781**	**4,666,507**	**23,568,894**	**13,273**	**5,477,596**	**26,871,979**

It will be seen from the statements above that Government Annuities have grown steadily in favour, especially since 1921. The actual purchase money received was highest in 1929, while the number of contracts reached a maximum in 1931. In the year 1932, however, the figures for both the number of contracts and the amount of purchase money received were well up toward these maximum levels. The fund, which on March 31, 1932, had been in existence for nearly twenty-three years, shows a particularly healthy growth and from 1928 to 1932 has increased from $14,719,000 to $26,583,000.

CHAPTER XXIV.—COMMERCIAL FAILURES.

According to Section 91 of the British North America Act, "the exclusive legislative authority of the Parliament of Canada" extends to bankruptcy and insolvency legislation, and an Insolvency Act (32-33 Vict., c. 16) was actually passed by the Dominion Parliament in 1869, applying to the four original provinces. This Act was in force for four years and was renewed by c. 46 of the Statutes of 1874, while in 1875 a new Insolvency Act (38 Vict., c. 16) applicable to the whole Dominion was passed, but was repealed in 1880. After this there was no Dominion legislation on the subject of bankruptcy until 1919. During the interval of nearly 40 years commercial failures were handled under provincial legislation, and the statistics relating to such failures during this period were compiled and published by Dun's and Bradstreet's commercial agencies. In 1919 a general Dominion Bankruptcy Act was passed (9-10 Geo. V, c. 36). Statistics of commercial failures dealt with under this Act since it came into force in 1920 have been compiled and published by the Dominion Bureau of Statistics. (See pp. 964-965.)

The history of commercial failures in Canada is traced by years from 1900 in Table **1.** Both Bradstreet's and Dun's records are included for comparative purposes. The two sets of records are shown in the table to have the same general tendency so far as numbers of failures are concerned. Dun's record, however, ordinarily shows a rather larger number of failures, and considerably larger assets and liabilities than Bradstreet's.

1.—Commercial Failures in Canada, with their Assets and Liabilities, According to Bradstreet's and Dun's Records, calendar years 1900-32.

Year.	Bradstreet's.			Dun's.		
	Failures.	Assets.	Liabilities.	Failures.	Assets.	Liabilities.
	No.	$	$	No.	$	$
1900	1,337	4,246,693	10,785,601	1,355	8,202,898	11,613,208
1901	1,379	5,264,551	11,783,837	1,341	7,686,823	10,811,671
1902	1,095	3,602,542	8,546,365	1,101	7,772,418	10,934,777
1903	958	3,870,605	8,372,011	978	4,872,422	7,552,724
1904	1,175	4,137,418	10,019,311	1,246	8,555,875	11,394,117
1905	1,430	6,584,191	13,879,700	1,347	6,822,005	9,854,659
1906	1,239	4,305,076	9,450,093	1,184	6,499,052	9,085,773
1907	1,365	5,276,698	11,735,272	1,278	9,443,227	13,221,250
1908	1,715	7,770,207	17,582,304	1,640	12,008,113	14,931,790
1909	1,588	6,195,515	12,811,184	1,442	10,318,511	12,982,800
1910	1,469	7,075,347	15,712,586	1,262	11,013,396	14,514,650
1911	1,401	6,420,331	13,086,946	1,332	9,964,404	13,491,196
1912	1,312	5,611,675	12,355,282	1,357	8,783,409	12,316,396
1913	1,827	8,140,990	16,650,450	1,719	12,658,979	16,979,406
1914	2,886	13,507,536	30,693,658	2,892	30,888,363	34,996,694
1915	2,621	14,227,192	32,134,312	2,652	39,243,658	40,676,621
1916	1,772	6,349,078	15,952,684	1,677	19,610,703	24,985,908
1917	1,109	6,207,512	13,616,822	1,088	12,994,179	18,108,347
1918	814	5,354,727	12,413,536	873	11,246,341	14,502,477
1919	625	5,089,534	10,095,232	751	10,731,541	16,224,259
1920	966	10,478,465	20,808,053	1,034	17,501,332	24,719,111
1921	2,350	21,489,236	48,553,757	2,379	55,114,487	68,947,140
1922	3,185	23,933,136	55,047,342	3,630	62,424,514	76,314,674
1923	2,915	21,619,354	51,416,766	3,197	45,480,216	61,853,697
1924	2,287	16,553,935	42,278,195	2,445	47,590,367	63,325,975
1925	2,094	14,511,917	35,505,951	2,337	32,518,709	45,399,425
1926	2,085	11,316,925	27,414,401	2,172	25,325,884	36,574,913
1927	1,993	10,617,083	25,846,247	2,154	24,312,741	34,177,441
1928	1,863	14,182,652	36,451,242	2,100	36,179,540	52,895,907
1929	2,091	11,527,584	31,990,900	2,286	29,528,527	44,299,881
1930	2,393	20,497,972	45,007,299	2,705	39,231,654	56,289,560
1931	2,721	20,893,645	46,058,639	2,516	37,014,665	51,914,404
1932	2,968	19,153,000	49,917,000	2,900	37,157,822	55,975,510

Failures by Branches of Business.—In every year the great majority of the commercial failures of the country are found among the trading establishments which are so much more numerous than the manufacturing. Thus, according to Dun's records, out of a total of 2,938 commercial failures in Canada and Newfoundland in 1932, 2,038 were among the trading establishments, including 416 in groceries and meats, 378 in clothing and furnishings and 219 general stores.

Out of the 703 manufacturers who failed, 126 were in clothing and millinery, 79 in the lumber or carpentering business and 78 among millers and bakers. The larger scale on which manufacturers operate is evident from the fact that the defaulted liabilities of the 703 manufacturers were nearly as great as those of the 2,038 traders. The figures of commercial failures include both Canada and Newfoundland and are analyzed in detail for the years 1930 to 1932 in Table **2,** while the totals by broad groups are given for 1915 and subsequent years in Table **3.**

2.—Commercial Failures in Canada and Newfoundland, by Branches of Business, calendar years 1930-32 [From Dun's Review].

Branch of Business.	1930.		1931.		1932.	
	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.
		$		$		$
Manufacturers—						
Iron and foundries	8	514,731	10	488,953	23	4,630,646
Machinery and tools	27	1,754,991	37	1,117,185	29	860,876
Woollens, carpets, etc	3	99,187	6	33,471	7	110,261
Cotton, hosiery, etc	2	59,200	1	20,000	1	6,465
Lumber, carpenters	111	5,711,336	63	2,450,145	79	4,690,943
Clothing, millinery	124	2,172,946	98	1,752,828	120	2,518,102
Hats, gloves and furs	32	416,048	22	328,818	26	368,154
Chemicals and drugs	13	141,475	8	91,288	11	119,881
Paints and oils	–	–	–	–	4	28,905
Printing and engraving	16	177,045	22	429,068	37	799,830
Milling and bakers	35	4,334,370	52	401,879	78	1,003,183
Leather, shoes, etc	38	906,881	21	607,976	30	640,657
Liquors and tobacco	11	724,814	14	292,803	17	330,937
Glass, earthenware	11	173,974	11	337,571	28	1,379,465
All other	188	4,062,920	198	5,148,929	213	5,219,744
Totals, Manufacturers	**619**	**21,249,918**	**563**	**13,500,914**	**703**	**22,708,019**
Traders—						
General stores	250	3,871,344	248	2,626,695	219	2,648,257
Groceries and meats	371	2,269,492	368	2,815,434	416	2,767,092
Hotels, restaurants	167	1,595,464	150	1,751,592	169	2,283,593
Liquors and tobacco	21	68,743	23	189,056	35	191,573
Clothing, furnishings	293	3,217,499	299	3,260,057	378	4,069,778
Dry goods and carpets	169	2,329,543	153	2,855,910	131	1,292,343
Shoes, rubbers and trunks	68	779,540	73	920,134	88	1,334,378
Furniture, crockery	37	437,295	41	405,086	38	843,933
Hardware, stoves and tools	47	452,706	58	552,555	72	1,235,578
Chemicals and drugs	46	385,863	29	179,167	61	478,157
Paints and oils	1	500	3	22,952	2	7,928
Jewellery and clocks	46	347,752	33	548,114	52	433,158
Books and papers	11	113,457	15	97,917	26	414,219
Hats, furs and gloves	27	655,203	20	550,409	35	974,826
All other	334	5,316,428	253	4,821,268	316	4,691,365
Totals, Traders	**1,888**	**21,840,829**	**1,766**	**21,596,346**	**2,038**	**23,666,178**
Other Commercial	**234**	**14,100,746**	**234**	**17,890,294**	**197**	**10,256,427**
Grand Totals	**2,741**	**57,191,493**	**2,563**	**52,987,554**	**2,938**	**56,630,654**

3.—Commercial Failures in Canada and Newfoundland, by Provinces and Classes, calendar year 1932, with Totals for 1915-31 [From Dun's Review].

Province.	Totals, Commercial.			Manufacturing.	
	No.	Assets.	Liabilities.	No.	Liabilities.
		$	$		$
Prince Edward Island	13	47,987	61,243	1	2,000
Nova Scotia	86	349,572	1,650,381	10	157,135
New Brunswick	69	505,909	731,862	8	70,154
Quebec	1,258	11,716,305	18,730,404	331	7,999,165
Ontario	899	18,869,715	27,240,357	254	12,865,663
Manitoba	174	2,155,328	2,747,255	26	471,969
Saskatchewan	71	625,047	897,622	5	59,620
Alberta	177	1,227,799	1,557,100	29	313,114
British Columbia	153	1,660,160	2,359,286	35	721,116
Canada	**2,900**	**37,157,822**	**55,975,510**	**699**	**22,659,936**
Newfoundland	38	145,801	655,144	4	48,113
Totals, 1932	**2,938**	**37,303,623**	**56,630,654**	**703**	**22,708,049**
" 1931	2,563	37,613,810	52,987,554	563	13,500,914
" 1930	2,741	39,474,582	57,191,493	619	21,249,918
" 1929	2,310	29,572,569	44,440,639	624	19,967,419
" 1928	2,120	36,407,391	53,420,199	506	17,032,983
" 1927	2,182	24,420,941	34,461,595	502	15,347,401
" 1926	2,196	25,668,509	37,082,882	527	16,465,754
" 1925	2,371	32,651,834	45,767,825	563	24,046,514
" 1924	2,474	47,937,427	64,530,975	625	36,542,658
" 1923	3,247	46,833,195	65,810,382	792	31,791,332
" 1922	3,695	63,097,789	78,068,959	857	39,080,791
" 1921	2,451	57,158,397	73,299,111	559	33,976,790
" 1920	1,078	18,569,516	26,494,301	255	15,871,216
" 1919	755	10,741,441	16,256,259	213	10,234,477
" 1918	873	11,251,341	14,502,477	232	8,248,807
" 1917	1,097	13,051,900	18,241,465	261	7,455,094
" 1916	1,685	19,670,542	25,069,534	363	8,796,646
" 1915	2,661	39,526,358	41,162,321	655	13,877,414

Province.	Trading.		Other Commercial.		Banking.	
	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.
		$		$		$
Prince Edward Island	10	45,243	2	14,000	-	-
Nova Scotia	69	991,115	7	502,131	-	-
New Brunswick	57	611,628	4	50,080	-	-
Quebec	854	9,572,647	73	1,158,592	-	-
Ontario	583	7,721,196	62	6,653,498	-	-
Manitoba	138	1,610,993	10	664,293	-	-
Saskatchewan	64	831,302	2	6,700	-	-
Alberta	125	735,754	23	508,232	-	-
British Columbia	105	945,269	13	692,901	-	-
Canada	**2,005**	**23,065,147**	**196**	**10,250,427**	-	-
Newfoundland	33	601,031	1	6,000	-	-
Totals, 1932	**2,038**	**23,666,178**	**197**	**10,256,427**	-	-
" 1931	1,766	21,596,346	234	17,890,294	-	-
" 1930	1,888	21,840,829	234	14,100,746	-	-
" 1929	1,546	17,435,263	140	7,037,962	-	-
" 1928	1,469	24,540,931	145	11,846,285	-	-
" 1927	1,544	16,566,799	136	2,547,395	-	-
" 1926	1,548	17,320,905	121	3,296,223	-	-
" 1925	1,693	19,514,049	115	2,207,262	-	-
" 1924	1,720	21,324,089	129	6,664,228	1	100,000
" 1923	2,319	31,339,763	136	2,679,287	1	18,500,000
" 1922	2,717	33,004,203	121	5,983,965	4	222,480
" 1921	1,739	29,886,569	153	9,435,752	1	45,233
" 1920	771	7,704,505	52	2,918,580	-	-
" 1919	494	4,475,628	48	1,546,154	-	-
" 1918	590	5,142,397	51	1,111,273	-	-
" 1917	777	8,417,239	59	2,369,132	-	-
" 1916	1,237	12,290,368	85	3,982,520	-	-
" 1915	1,888	21,696,890	118	5,558,017	1	150,000

Bradstreet's Record of Commercial Failures.—The number of commercial failures in Canada, together with the assets and liabilities, is shown by provinces for 1931 and 1932 in Table **4**, according to Bradstreet's records.

4.—Commercial Failures in Canada, by Provinces, calendar years 1931 and 1932.

[From Bradstreet's].

Province.	Numbers of Failures.		Assets.		Liabilities.	
	1931.	1932.	1931.	1932.	1931.	1932.
	No.	No.	$	$	$	$
Prince Edward Island	4	5	10,079	36,000	24,635	57,000
Nova Scotia	53	76	910,187	743,000	580,286	1,392,000
New Brunswick	66	72	286,130	458,000	590,617	873,000
Quebec	1,122	1,352	6,935,971	7,318,000	18,512,522	23,393,000
Ontario	807	879	6,733,594	6,747,000	13,874,891	14,908,000
Manitoba	192	170	1,414,898	827,000	4,262,181	2,716,000
Saskatchewan	197	132	1,622,070	855,000	2,876,247	1,588,000
Alberta	92	89	945,211	698,000	1,250,567	1,135,000
British Columbia	188	193	2,035,505	1,471,000	4,086,693	3,855,000
Canada	**2,721**	**2,968**	**20,893,645**	**19,153,000**	**46,058,639**	**49,917,000**

Assignments under the Bankruptcy and Winding Up Acts.—Under the Bankruptcy and Winding Up Acts (R.S.C., 1927, cc. 11 and 213) certain documents relating to assignments have, since 1920, been forwarded to the Dominion Statistician for statistical analysis. Table **5** gives the resulting figures of failures, by provinces, in 1922 and subsequent years, while Table **6** classifies them by branches of business. Table **7** gives the assets and liabilities of the assignors. A detailed analysis of the 1932 failures, by provinces and branches of business, is made in Table **8**.

5.—Commercial Failures in Canada, by Provinces, calendar years 1922-32.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1922	15	121	131	1,589	1,058	284	272	299	156	3,925
1923	16	155	67	1,181	970	258	280	323	158	3,408
1924	3	69	67	907	835	100	131	150	57	2,319
1925	4	71	67	758	721	85	77	139	74	1,996
1926	4	63	74	654	655	84	68	113	58	1,773
1927	4	66	74	658	681	97	54	135	72	1,841
1928	4	90	56	767	758	103	63	126	70	2,037
1929	1	71	61	927	762	91	84	101	69	2,167
1930	3	61	45	1,011	776	113	146	152	95	2,402
1931	7	51	74	795	793	109	152	131	104	2,216
1932	9	62	80	968	889	86	91	131	104	2,420

6.—Commercial Failures in Canada, by Branches of Business, calendar years 1924-32.

Year.	Trade.	Manufactures.	Agriculture.	Logging and Fishing.	Mining.	Construction.	Transport-ation and Public Utilities.	Finance.	Service.	Not Classified.	Total.
1924	1,317	329	204	14	22	44	36	8	129	216	2,319
1925	1,026	403	158	14	15	50	21	5	220	84	1,996
1926	805	390	135	27	20	52	34	1	225	84	1,773
1927	818	430	116	30	26	63	36	–	243	79	1,841
1928	884	505	108	31	23	70	45	5	263	103	2,037
1929	1,100	443	125	4	11	61	21	5	239	158	2,167
1930	1,204	488	115	12	9	55	48	29	283	159	2,402
1931	1,102	464	125	5	7	61	42	21	255	134	2,216
1932	1,171	468	190	9	6	83	43	7	290	153	2,420

7.—Estimated Assets and Liabilities of Commercial Failures in Canada, calendar years 1922-1932.

Year.	Estimated Grand Total Assets.	Estimated Grand Total Liabilities.
	$	$
1922	52,336,488	63,692,219
1923	62,127,489	61,617,527
1924	43,194,035	48,105,397
1925	26,968,371	32,153,697
1926	24,676,661	32,291,125
1927	23,197,894	30,634,469
1928	26,583,462	32,455,437
1929	32,064,027	38,747,638
1930	44,048,171	48,164,065
1931	46,839,179	52,552,900
1932	40,604,208	51,629,303

8.—Commercial Failures in Canada, by Provinces and Branches of Business, calendar year 1932, with Totals for 1931.

Branch of Business.	P.E.I. and N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total for 1932.	Total for 1931.
Trade—										
General Stores	7	9	56	42	14	18	16	4	165	159
Grocery	5	3	42	31	5	2	6	3	97	100
Confectionery	3	1	28	27	3	2	4	1	67	73
Drink and Tobacco	–	–	15	7	–	–	–	–	22	16
Fish and Meat	5	1	32	26	2	2	3	3	73	63
Boots and Shoes	1	3	26	26	–	3	–	3	62	55
Dry Goods	5	4	34	29	4	3	3	1	82	77
Clothing	4	7	43	44	10	12	9	5	130	122
Furniture	–	1	9	13	–	–	1	3	37	37
Books and Stationery	–	–	14	14	1	2	–	2	33	15
Automobile	2	6	13	20	3	–	6	4	55	51
Hardware	1	–	14	21	–	2	–	–	40	36
Electric Apparatus	–	–	18	18	1	3	–	1	41	30
Jewellery	3	2	17	13	–	–	1	2	39	36
Coal and Wood	–	2	13	13	3	–	2	1	34	37
Drugs and Chemicals	–	–	15	16	–	1	3	1	37	32
Miscellaneous	8	9	53	60	7	8	6	13	158	163
Totals	44	48	442	420	53	58	60	47	1,172	1,102
Manufacture—										
Vegetable Foods	3	1	30	26	2	3	7	5	77	79
Drink and Tobacco	–	–	–	–	–	–	–	1	1	9
Animal Foods	–	–	10	10	1	–	–	2	23	30
Fur and Leather	–	1	21	21	2	2	2	1	50	40
Pulp and Paper	–	–	1	–	–	–	–	–	1	9
Textiles	–	–	17	12	–	1	–	–	30	35
Clothing	2	1	37	33	1	1	2	2	79	72
Lumber and Manufactures	–	1	18	17	1	–	1	7	45	33
Iron and Steel	1	–	7	4	–	–	–	–	12	12
Non-ferrous Metals	–	–	14	10	–	–	1	–	25	22
Non-metallic Minerals	–	–	9	9	–	–	–	2	20	12
Drugs and Chemicals	–	–	2	1	–	–	–	–	3	1
Miscellaneous	3	3	39	43	2	5	4	3	102	110
Totals	9	7	205	186	9	12	17	23	468	464
Service—										
Garages	4	1	28	22	1	1	6	3	66	52
Other Custom and Repairs	–	1	33	30	1	2	1	–	68	42
Personal Service	3	7	32	33	4	6	12	9	106	73
Professional Service	1	–	7	5	–	–	–	–	13	12
Recreational Service	–	1	4	7	1	–	1	1	15	22
Business Service	–	3	10	5	2	–	1	1	22	54
Totals	8	13	114	102	9	9	21	14	290	255
Other—										
Agriculture	3	5	81	68	5	4	21	2	189	125
Mining	–	–	3	1	–	–	–	2	6	7
Logging, Fishing, Trapping	–	–	5	1	–	–	–	2	8	5
Construction	–	1	39	35	3	1	4	3	86	61
Transportation and Public Utilities	2	–	15	17	3	2	2	2	43	42
Finance	–	1	2	2	1	–	–	2	8	21
Totals	5	7	145	124	12	7	27	13	340	261
Not Classified	**5**	**5**	**62**	**57**	**3**	**5**	**6**	**7**	**150**	**134**
Grand Totals	**71**	**80**	**968**	**889**	**86**	**91**	**131**	**104**	**2,420**	**2,216**

CHAPTER XXV.—EDUCATION.

Section 1.—Schools, Colleges and Universities.[1]

Throughout the Dominion of Canada public education, except for instruction of the native Indian population, is a matter of provincial concern. Before Confederation, the maritime colonies were separated from Ontario by French-speaking Quebec, and in each colony an educational system specially adapted to the local conditions had come into existence. When Confederation was under consideration, the protection of existing vested rights was the predominant consideration. As a result, Section 93 of the British North America Act, which embodies the Canadian constitution in so far as that constitution is a written one, provides that in and for each province the Legislature may exclusively make laws in respect of education, except that "nothing in any such law shall prejudicially affect any right or privilege with respect to denominational schools which any class of persons have by law in the province at the union".

Inasmuch as the administration of public education is one of the chief functions of Provincial Governments, in each of the provinces except Quebec there is a Department of Education administered either by a member of the Provincial Executive Council or Cabinet or by the Executive Council or Cabinet as a whole. In practice, however, the routine administration is in the hands of the permanent officials of the Department of Education, who are members of the permanent civil service. In Quebec the Superintendent of Education, appointed by the Government, is *ex officio* President of the Council of Public Instruction. The link between the Department of Public Instruction and the Government is the Provincial Secretary; there are also two deputy heads, called the French and English Secretaries of the Department.

Since the Departments of Education are permanent authorities, controlled as to details of administration by permanent officials, educational policy is relatively permanent; further, the control of the Governments over education throughout the provinces is relatively stronger than in the United States. A capable Deputy Minister or Superintendent of Education impresses his personality and his views upon the whole system of his province, especially as in practice he controls the payment of government grants, which constitute, on the average, about 14 p.c. of the total expenditure applied to educational purposes.

The Department of Education in each province naturally has its headquarters at the capital of the province. Its local representatives are the school inspectors, who are appointed and paid by the Provincial Governments, except for the "public" and "separate" schools in Ontario, where they are appointed by the county or city municipality from a list approved by the province (in all but unorganized districts), and where the cities receive a grant from the province for inspection purposes in place of having inspectors' salaries paid direct.

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[1] Revised by M. C. MacLean, M.A., F.S.S., Chief, Education Statistics Branch, Dominion Bureau of Statistics. This Branch is concerned with compiling and publishing comparable data relating to educational institutions throughout Canada, and to this end co-operates with the Provincial Departments of Education. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Education".

Education in Quebec.—In Quebec there are two distinct systems of education—the Protestant and the Roman Catholic systems—in each of which the teaching of religion takes a prominent position. In the former, which is under the control of the Protestant Committee of the Council of Public Instruction, with an English Secretary, the curriculum and the general system of education is similar to those in the other provinces, except that the highest grade is Grade XI, from which students are matriculated to McGill University and Bishop's University, the two Protestant English-speaking universities of the province.

In the Roman Catholic schools, which are mainly French-speaking, as the Protestant schools are English-speaking, the administration is in the hands of the Catholic Committee of the Council of Public Instruction, with a French Secretary. General elementary and continuation or "complementary" training is given by means of a curriculum, extending over one preparatory "year", six "years" of an elementary course, and two "years" of a complementary course. Some of these "years" require more than a year to complete, the completion of the "sixth year" corresponding in a general way to the end of the elementary grades, or high school entrance, in other provinces. Beginning in the school year 1929-30, a new superior course of three "years" beyond the complementary course was provided for. These are called the ninth, tenth, and eleventh "years". They enrolled over 4,400 students in the second year of their introduction.

Summary Statistics of Education.—The recorded enrolment at Canadian educational institutions in 1931 was 2,542,747, and the total cost of the support of schools, colleges and universities was $178,701,507. This represented an increase over the previous year of 2·1 p.c. in attendance, and 8·1 p.c. in costs—the latter percentage increase being higher on account of a great part of the enrolment increase being in the more advanced and more costly institutions. A concise numerical summary of pupils, teachers, institutions, and costs for the year may be given as follows:—

Type of Institution.	Institutions.	Pupils.	Teachers.	Expenditure.
	No.	No.	No.	$
(1) Provincially-controlled Schools—				
Ordinary day	30,500[1]	2,137,810	65,248	144,748,823
Technical day	136	56,320	2,017	
Technical evening	380	121,437	3,178	
Normal schools	46	7,956	490	
Blind and deaf	11	1,785	300[1]	
(2) Privately-controlled Schools—				
Ordinary day	816	95,083	5,657	7,187,000[1]
Business training	179	22,827	607	
(3) Dominion Indian Schools	352	16,415	500[1]	2,754,395
(4) Universities or Colleges—				
Preparatory	54[2]	19,845	1,423	24,011,289
University grade	153	41,168	4,788	
Others	10[2]	22,101		
Totals	32,637	2,542,747	84,208	178,701,507

[1] Estimated. [2] Including only affiliated schools that are not enumerated in "university grade".

Table **1** gives a more detailed summary of all institutions by provinces; two statistical subsections follow, dealing with the provincially-controlled schools and institutions of higher education respectively.

1.—Summary of Educational Institutions in Canada,

A. ENROL

No.		P.E.I.	N.S.	N.B.
1	Ordinary day schools[1]—			
	(a) Publicly-controlled	17,506	115,511	87,160
	(b) Privately-controlled	526	2,746	3,931
2	Technical and vocational schools—			
	(a) Publicly-controlled day courses[3]	1,140	3,635	1,483
	(b) Publicly-controlled evening and correspondence[4]	–	4,810	2,004
	(c) Business colleges, day courses	140	594	495
	(d) Business colleges, evening courses	51	202	141
3	Normal schools	With 4 (a)	682	310
4	Universities and colleges—			
	(a) Preparatory courses	374	863	615
	(b) University standard	108	2,270	1,266
	(c) Other courses at university[5]	21	1,157	4
5	Schools for blind and deaf[6]	10	173	73
6	Indian schools	34	409	320
	Grand Totals	**19,910**	**133,052**	**97,802**
	Population of 1931	**88,038**	**512,846**	**408,219**
7	Secondary grades or higher, [2 (b) unclassified]	3,796	24,159	10,414
8	Elementary grades	15,885	104,083	82,554

B. EXPEND

No.		P.E.I.	N.S.	N.B.
9	Publicly-controlled schools, *i.e.*, 1 (a), 2 (a), (b), 3 and 5 above:			
	(a) By Provincial Governments	321,508	1,012,681	511,850
	(b) By Ratepayers, etc.	189,444	3,181,614	2,695,627
10	Privately-controlled schools, *i.e.*, 1 (b), 2 (c) above, (estimated)	18,000	128,000	164,000
11	Universities and colleges	70,089	1,122,390	519,282
12	Indian schools	1,255	63,190	20,694
	Totals	**690,296**	**5,507,875**	**3,911,453**

C. FURTHER INFORMATION ON ORDINARY DAY SCHO

No.		P.E.I.	N.S.	N.B.
	Enrolment—			
13	Boys	8,820	57,304	43,456
14	Girls	8,686	58,207	43,704
15	In elementary grades	17,285	101,659	–
16	In secondary grades	2,184	13,852	–
17	In urban schools	6,737	54,078	47,253
18	In rural schools	10,769	61,433	39,907
	Attendance—			
19	Average daily attendance	12,721	87,418	69,451
20	Average (median) days per pupil	164	159	173
21	Average number of days schools open	195	195	192
22	Percentage of enrolment in average attendance	72·6	75·6	79·6
23	Teachers, totals	628	3,484	2,708
24	Male	148	331	272
25	Female	480	3,153	2,436
	Accommodation—			
26	Number of school districts	472	1,759	1,483
27	Number of school houses	472	–	–
28	Number of class-rooms	626	3,231	2,473
29	Number of pupils per class-room	28	36	35
30	Number of rural schools	415	1,439	1,313

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[1] Figures for 1 (a) and 1 (b) in Quebec are for 1929-30; for 1 (a) in Ont., except secondary schools, a for calendar year 1930; all others are for 1930-31.

[2] Includes 242 in Yukon in 1 (a), 379 in Yukon and N.W.T. in 6, and 13,953 in population.

[3] There are some duplicates, impossible to separate, between 1 (a) and 2 (a), in the four western provinces.

[4] Includes 7,316 in non-technical night schools in Ont., and 31,494 in non-subsidized evening domestic science courses in Quebec.

by Provinces, 1931, or Latest Year Reported.

MENT.

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.[2]	No.
							1
526,304[1]	727,342[1]	153,553	230,492	165,786	113,914	2,137,810	
61,110[1]	11,196	5,294	2,349	2,944	4,987	95,083	
							2
7,153	29,470	3,555	1,379	2,649	5,856	56,320	
45,148	54,756	3,532	1,908	1,811	7,468	121,437	
1,834	7,093	1,927	818	960	1,482	15,343	
1,021	3,099	1,248	468	669	585	7,484	
2,059	1,666	570	1,252	961	456	7,956	3
							4
13,424	2,440	706	1,000	422	1	19,845	
10,976	16,419	3,311	2,687	1,688	2,443	41,168	
6,536	11,656	866	707	136	1,018	22,101	
776	439	111	62	56	85	1,785	5
1,539	4,296	2,346	2,072	1,582	3,438	16,415	6
677,880	**869,872**	**177,019**	**245,194**	**179,664**	**141,733**	**2,542,747**	
2,874,255	**3,431,683**	**709,139**	**921,785**	**731,605**	**694,263**	**10,376,786**	
76,610	182,029	30,985	38,015	31,751	31,497	429,256	7
545,195	662,337	142,434	204,337	146,102	102,725	2,005,652	8

ITURES.

							9
5,906,164	5,598,878	1,310,587	2,763,904	1,593,995	3,287,277	22,306,844	
19,516,807	56,376,213	9,152,892	14,141,651	10,961,070	6,226,661	122,441,979	
3,508,000	1,604,000	551,000	272,000	343,000	599,000	7,187,000	10
7,667,031	9,142,104	1,934,577	1,238,121	1,304,645	1,013,050	24,011,289	11
79,866	479,359	486,105	582,084	520,284	446,673	2,754,395	12
36,677,868	**73,200,554**	**13,435,161**	**18,997,769**	**14,722,994**	**11,563,661**	**178,701,507**	

OLS UNDER PUBLIC CONTROL [ITEM I (A) ABOVE].[6]

289,650	384,781	77,255	115,800	84,079	57,676	1,118,821	13
297,764	372,031	76,298	114,692	84,651	56,238	1,112,271	14
–	653,292	135,209	200,960	144,464	95,749	–	15
–	103,520	18,344	28,598	24,266	18,165	–	16
–	545,640	111,622	99,671	88,614	69,616	–	17
–	211,172	41,931	130,821	80,116	44,298	–	18
474,107	568,313	120,703	176,716	136,733	99,375	1,745,537	19
–	–	174	178	180	–	–	20
–	–	197	200	193	–	–	21
81·2	75·1	78·6	76·6	81·0	87·2	78·7	22
21,060	20,732	4,427	8,415	5,844	3,948	71,246	23
3,751	4,283	881	2,394	1,520	1,163	14,743	24
17,309	16,449	3,546	6,021	4,324	2,785	56,503	25
6,845	–	2,232	4,939	3,647	811	–	26
8,026	7,654	2,034	–	–	1,170	–	27
19,000[7]	18,500[7]	4,304	6,856	5,624	3,662	64,276	28
30	40	36	34	30	31	–	29
–	6,126	–	–	3,072	999	–	30

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[5] Includes also 598 in the Departmental summer schools for teachers in N.S., 4,626 in Ont., and 162 in B.C., not held at universities or colleges.

[6] Includes also 1 (b) in Quebec and Alberta, and 2 (a) in Ontario and British Columbia.

[7] Estimated on same basis as in previous reports.

[8] These students are entered according to provinces of residence. There are schools in five provinces.

Subsection 1.—The Provincially-Controlled Schools.

It is considered that the best general test of the efficiency of public general education in Canada is furnished by the statistics of Table **2**, showing the 1931 age-grade distribution of 1,416,667 pupils in the provincially-controlled schools of seven provinces. Many other tables of this form, analysing age-grade distribution by provinces, by sex, and by rural and urban areas and graded or ungraded schools, may be consulted in the Dominion Bureau of Statistics' "Annual Survey of Education in Canada, 1931", pp. 22-43.

2.—Provincially-Controlled Schools in Canada; Distribution of 1,416,667 Pupils in Seven Provinces, by Age and Grade, 1931.

Age.	Elementary Grades.								
	K. and K.P.[1]	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
4	–	204	–	–	–	–	–	–	–
5	6,303	7,548	45	2	–	–	–	–	–
6	16,726	62,643	4,236	216	9	–	–	–	–
7	6,677	88,253	30,509	4,294	460	16	–	–	–
8	1,748	46,495	58,556	25,430	7,661	532	29	5	–
9	449	18,431	39,961	42,007	36,605	7,794	738	68	3
10	130	7,178	18,566	28,590	49,192	35,037	7,633	812	143
11	61	2,900	7,487	13,944	31,793	43,431	27,632	6,557	1,302
12	23	1,542	3,271	6,339	17,102	31,536	38,322	24,112	8,422
13	13	797	1,535	3,139	8,787	18,200	28,700	33,130	25,809
Totals, 7-13	9,101	165,596	159,885	123,743	151,600	136,546	103,054	64,684	35,679
14	18	425	753	1,544	4,211	9,912	17,323	25,897	34,827
15	–	196	328	600	1,579	4,065	7,968	13,233	25,232
16	1	77	115	177	468	1,069	2,365	4,437	10,852
17	–	35	29	63	127	234	407	910	2,761
Totals, 14-17	19	733	1,225	2,384	6,385	15,280	28,063	44,477	73,672
18	–	18	19	23	30	61	82	155	571
19	–	25	13	36	40	39	61	56	174
Grand Totals	**32,149**	**236,767**	**165,423**	**126,404**	**158,064**	**151,926**	**131,260**	**109,372**	**110,096**

Age.	Secondary Grades.						Totals.		Grand Total.
	IX.	X.	XI.	XII.	Special.	Unclassified.	Elementary.	Secondary.	
4	–	–	–	–	–	–	204	–	204
5	–	–	–	–	–	–	13,898	–	13,898
6	–	–	–	–	–	296	83,830	–	84,126
7	–	–	–	–	–	229	130,209	–	130,438
8	–	–	–	–	–	243	140,456	–	140,699
9	1	–	–	–	–	275	146,056	1	146,332
10	30	–	–	–	–	234	147,281	30	147,545
11	422	29	–	–	2	217	135,107	453	135,777
12	3,609	436	8	–	86	188	130,669	4,139	134,996
13	12,262	3,227	391	1	476	140	120,110	16,357	136,607
Totals, 7-13	16,324	3,692	399	1	564	1,526	949,888	20,980	972,394
14	21,090	10,336	2,926	41	1,051	74	94,910	35,444	130,428
15	20,517	16,274	8,730	617	1,379	33	53,201	47,517	100,751
16	11,243	13,836	13,684	2,464	814	5	19,561	42,041	61,607
17	3,981	7,173	10,742	4,397	544	–	4,566	26,837	31,403
Totals, 14-17	56,831	47,619	36,082	7,519	3,788	112	172,238	151,839	324,189
18	1,084	2,360	5,333	3,502	406	1	959	12,685	13,645
19	535	1,042	2,798	2,801	588	3	444	7,764	8,211
Grand Totals	**74,774**	**54,713**	**44,612**	**13,823**	**5,346**	**1,938**	**1,221,461**	**193,268**	**1,416,667**

[1] Kindergarten and Kindergarten-primary.

General elementary and secondary education throughout the Dominion, in so far as it is provincially-controlled, is carried on, except in Quebec, in free schools supported by general taxation. These schools may be divided into 12 grades, 8 of which are normally considered to be elementary and 4 secondary. The twelfth grade is in most provinces a postgraduate year, corresponding to the first year of a university course. The average pupil takes one school year to complete each grade, so that entering school at 6 years of age, he would matriculate to the university at 17 or 18.

An historical summary of the enrolment and average attendance in provincially-controlled schools from 1901 to 1931 is given by provinces in Table **3.** The totals of pupils enrolled in all provinces in the year 1901 is an approximation, based upon provincial statistics for the nearest available years. The enrolment and average attendance, in cities of 10,000 population and over, are given in Table **4.**

3.—Historical Summary of Enrolment and Average Attendance in Schools in Canada, by Provinces, 1901-31.

TOTAL NUMBER ENROLLED, 1901-31.

NOTE.—Figures of enrolment and average attendance in various years prior to 1901 are given on pp. 839 and 840 of the 1932 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.[1]	Ont.[2]	Man.	Sask.	Alta.	B.C.	Canada.
1901....	20,779	98,410	66,689	314,881	492,534	51,888	–		23,615	1,083,000
1902....	20,803	99,059	67,425	321,288	490,860	54,056	–		23,901	1,077,394
1903....	19,956	98,768	65,951	326,183	487,880	57,409	33,191		24,499	1,113,837
1904....	19,031	96,886	65,278	329,666	484,351	58,574	41,033		25,787	1,120,606
1905....	19,272	100,252	66,897	335,768	487,635	63,287	25,191	24,254	27,354	1,149,909
1906....	18,986	100,332	66,635	341,808	492,544	64,123	31,275	28,784	28,522	1,173,009
1907....	19,036	100,007	66,422	347,614	493,791	67,144	37,622	34,338	30,039	1,196,013
1908....	18,012	100,105	66,383	352,944	501,641	71,031	47,086	39,653	33,223	1,230,169
1909....	18,073	101,680	67,735	367,012	507,219	73,044	55,116	46,048	36,227	1,272,204
1910....	17,932	102,035	68,154	374,547	510,700	76,247	65,392	55,307	39,670	1,310,117
1911....	17,397	102,910	68,951	389,123	518,605	80,848	72,260	61,660	49,451	1,356,879
1912....	17,078	103,984	69,199	400,036	526,951	–	81,896	70,414	50,170	1,319,728
1913....	17,555	105,269	69,663	411,784	542,822	83,679	101,463	79,909	57,384	1,469,752
1914....	19,069	106,351	70,622	435,895	561,927	93,954	113,985	89,910	61,957	1,552,976
1915....	18,402	107,768	72,013	448,087	569,030	100,963	122,862	97,286	64,264	1,601,035
1916....	18,362	109,189	73,007	464,447	560,340	103,796	129,439	99,201	64,570	1,622,351
1917....	18,190	109,032	71,981	463,390	561,865	106,588	142,617	107,727	65,118	1,646,508
1918....	17,861	108,097	71,782	467,508	564,655	109,925	151,326	111,109	67,516	1,669,776
1919....	17,587	106,982	71,029	486,201	584,724	114,662	164,219	121,567	72,006	1,738,977
1920....	17,354	108,096	72,988	495,887	604,923	123,452	174,925	135,750	79,243	1,812,618
1921....	17,510	109,483	73,712	512,651	632,123	129,015	184,871	124,328[3]	85,950	1,869,643
1922....	18,323	114,229	77,774	530,705	654,893	136,876	183,935	142,902	91,919	1,951,556
1923....	17,742	114,458	78,753	537,406	667,922	142,369	194,313	148,045	94,888	1,995,896
1924....	17,281	111,594	79,265	541,485	671,311	144,491	204,154	147,373	96,204	2,013,158
1925....	17,427	112,352	80,145	548,519	677,458	145,834	206,595	147,796[4]	97,954	2,034,080
1926....	17,324	112,391	80,769	552,832	686,285	148,279	213,404	150,526[4]	101,688	2,063,498
1927....	17,210	112,556	80,690	557,732	700,476	148,763	218,560	154,380[4]	105,008	2,095,375
1928....	17,214	112,898	82,170	565,845	708,081	150,883	223,049	159,086[4]	108,179	2,127,405
1929....	17,180	113,309	83,580	577,373	712,919	150,517	227,263	164,850[4]	109,558	2,156,549
1930....	17,277	113,860	85,635	583,684	727,342	151,846	228,434	168,076[4]	111,017	2,187,171
1931....	17,506	115,511	86,355	–	–	153,553	230,492	168,730[4]	113,914	–

[1] Primary schools only. [2] Not including vocational schools. [3] Half year only. [4] Including private schools.

3.—Historical Summary of Enrolment and Average Attendance in Schools in Canada, by Provinces, 1901-31—concluded.

AVERAGE DAILY ATTENDANCE, 1901-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
1901....	12,330	53,643	37,473	232,255	275,234	27,550	–		15,335	669,000
1902....	12,884	55,438	38,657	236,924	275,910	28,306	–		15,808	–
1903....	12,112	55,213	38,032	243,123	275,385	36,479	16,321		16,627	704,000
1904....	11,722	54,000	37,567	246,319	273,815	31,326	20,918		17,071	705,000
1905....	11,627	56,342	39,402	255,420	281,674	33,794	13,493	13,375	18,871	724,171
1906....	11,903	59,165	38,482	263,111	285,330	34,947	15,770	14,782	19,809	743,496
1907....	11,543	57,173	38,790	266,510	284,998	37,279	19,841	17,310	20,459	754,060
1908....	11,647	58,343	40,202	271,019	292,052	40,691	26,081	18,923	23,473	783,584
1909....	11,543	61,787	42,501	285,729	295,352	41,405	28,998	22,225	25,662	815,449
1910....	11,632	65,630	42,596	293,035	299,747	43,885	34,517	29,611	28,423	849,344
1911....	10,511	61,250	42,791	301,678	305,648	45,303	38,278	32,556	32,517	870,801
1912....	10,916	63,640	43,685	314,520	315,255	–	49,329	39,226	37,384	874,239
1913....	11,003	65,686	44,375	324,447	330,474	48,163	56,005	45,888	43,072	969,380
1914....	11,170	66,599	44,534	344,657	346,509	58,778	65,009	54,582	49,090	1,041,108
1915....	11,694	70,361	47,889	360,897	365,959	68,250	72,113	61,112	52,494	1,111.075
1916....	11,347	69,227	48,069	373,364	355,364	66,561	71,522	60,271	50,880	1,140,793
1917....	11,319	70,118	46,860	367,468	369,081	69,209	88,758	65,374	52,577	1,141,065
1918....	11,334	67,923	46,515	369,057	329,972	69,968	91,010	68,489	54,748	1,107,467
1919....	10,908	65,906	45,797	365,803	388,768	72,072	98,791	74,776	56,692	1,179,513
1920....	10,991	66,442	46,950	372,377	396,141	88,563	101,355	82,417	59,791	1,237,146
1921....	11,446	78,238	49,655	397,172	446,396	86,137	113,412	89,401	68,597	1,335,454
1922....	12,338	79,410	51,590	421,604	470,073	95,433	119,041	100,515	75,528	1,425,532
1923....	11,763	83,472	53,611	422,159	474,859	98,787	130,499	105,364	77,752	1,458,266
1924....	11,783	79,509	58,179	430,184	487,410	103,775	139,782	105,852	79,262	1,506,698
1925....	12,259	80,318	58,182	437,988	496,355	104,312	144,650	107,880	82,721	1,524,665
1926....	11,823	80,446	58,346	443,255	498,662	106,809	152,430	110,928	85,293	1,547,992
1927....	11,777	81,426	60,426	448,018	513,071	103,793	157,392	115,125	88,306	1,582,334
1928....	12,123	82,591	61,377	457,009	517,463	114,270	157,207	119,084	91,760	1,619,542
1929....	12,144	84,275	61,127	464,224	562,702	116,766	161,658	123,480	94,410	1,644,786
1930....	12,201	85,080	67,156	474,107	568,313	117,037	169,893	132,573	96,196	1,722,556
1931....	12,721	87,418	66,810	–	–	120,703	176,716	136,733	99,375	–

4.—Total Pupils Enrolled and in Average Attendance, and Total in High School Grades, in Cities of 10,000 or over, by Sex, 1931, or Latest Year Reported.

NOTE.—The high school enrolment in Quebec cities is not given because it would not be complete without including the high school pupils of the classical colleges and independent classical schools and of the normal schools. The figures of secondary grades for Ontario cities represent high schools, vocational schools, and collegiate institutes only; they do not include pupils in fifth classes.

City.	Numbers of Pupils Attending General Schools.				Numbers of Pupils in High School Grades (included in General Schools figures).		
	Boys.	Girls.	Total.	Average Attendance.	Boys.	Girls.	Total.
Belleville, Ont	1,876	1,758	3,634	2,713	470	450	920
Brandon, Man	1,983	2,067	4,050	3,540	314	398	712
Brantford, Ont	2,624	2,567	7,191	5,648	612	604	1,216
Calgary, Alta	8,835	8,896	17,731	15,737	1,635	2,010	3,645
Charlottetown, P.E.I	1,148	1,044	2,192	1,894	146	150	296
Chatham, Ont	2,012	1,924	3,936	3,003	453	451	904
Chicoutimi, Que	1,505	1,537	3,042	2,565	–	–	–
Cornwall, Ont	1,764	1,804	3,568	2,902	205	242	447
East Windsor, Ont	2,215	2,198	4,413	3,284	–	–	–
Edmonton, Alta	9,113	9,807	18,920	15,925	1,662	2,284	3,946
Fort William, Ont	3,578	3,705	7,283	6,031	497	621	1,118
Galt, Ont	1,687	1,709	3,396	2,774	374	401	775
Glace Bay, N.S	2,620	2,640	5,260	4,269	171	260	431
Granby, Que	918	926	1,844	1,598	–	–	–
Guelph, Ont	2,439	2,351	4,790	3,866	438	444	882
Halifax, N.S	6,275	6,218	12,493	10,297	554	742	1,296
Hamilton, Ont	18,421	17,424	35,845	27,315	2,943	2,322	5,265
Hull, Que	3,210	3,144	6,354	5,584	–	–	–

4.—Total Pupils Enrolled and in Average Attendance, and Total in High School Grades, in Cities of 10,000 or over, by Sex, 1931, or Latest Year Reported—concluded.

City.	Numbers of Pupils Attending General Schools.				Numbers of Pupils in High School Grades (included in General Schools figures).		
	Boys.	Girls.	Total.	Average Attendance.	Boys.	Girls.	Total.
Joliette, Que	1,058	1,081	2,139	1,812	–	–	–
Kingston, Ont	2,477	2,456	4,933	3,873	457	475	932
Kitchener, Ont	3.684	3.720	7.404	5,890	610	634	1,244
Lachine, Que	1,692	1,825	3,517	3,211	–	–	–
Lethbridge, Alta	1.632	1.595	3.227	2,859	316	398	714
Lévis, Que	1,239	1,093	2,332	2,072	–	–	–
London, Ont	8,058	7,687	15,745	12,801	1,708	1,692	3,400
Medicine Hat, Alta	1,399	1,360	2,759	2,392	281	341	622
Moncton, N.B	2,384	2,311	4,695	4,081	230	268	498
Montreal, Que	74,783	74,908	149,691	123,865	–	–	–
Moose Jaw, Sask	2,931	2,829	5,760	–	549	576	1,125
New Westminster, B.C	1,823	1,823	3,646	3,281	468	490	958
Niagara Falls, Ont	2,175	1,983	4,158	3,605	357	282	639
North Bay, Ont	2,266	2,143	4,409	3,492	353	286	639
Oshawa, Ont	2,799	2,824	5,623	4,458	523	530	1,053
Ottawa, Ont	13,996	13,072	27,068	19,695	1,877	1,960	3,837
Outremont, Que	2,171	2,533	4,704	4,165	–	–	–
Owen Sound, Ont	1,628	1,456	3,084	2,483	331	317	648
Peterborough, Ont	2,677	2,636	5,313	4,284	383	443	826
Port Arthur, Ont	1,983	1,879	3,862	4,065	645	564	1,209
Quebec, Que	13,027	13,148	26,175	21,678	–	–	–
Regina, Sask	6,186	6,245	12,431	–	1,116	1,323	2,439
St. Boniface, Man	1,800	1,925	3,725	2,787	220	290	510
St. Catharines, Ont	3,187	3,182	6,369	5,140	580	635	1,215
St. Hyacinthe, Que	1,043	1,301	2,344	2,127	–	–	–
St. Jean, Que	749	796	1,545	1,291	–	–	–
Saint John, N.B	5,027	5,254	10,281	8,942	766	948	1,714
St. Thomas, Ont	1,977	2,038	4,015	3,303	527	503	1,030
Sandwich, Ont	1,607	1,533	3,140	2,246	110	109	219
Sarnia, Ont	2,277	2,245	4,522	3.550	496	542	1,038
Saskatoon, Sask	5,289	5,509	10,798	–	1,044	1,338	2,382
Sault Ste. Marie, Ont	3,385	3,342	6,727	5,187	586	558	1,144
Shawinigan Falls, Que	1,827	1,822	3,649	3,353	–	–	–
Sherbrooke, Que	2,893	3,165	6,058	5,272	–	–	
Sorel, Que	946	861	1,807	1,621	–	–	–
Stratford, Ont	2,189	2,110	4,299	3,473	401	415	816
Sudbury, Ont	2,152	2,121	4,273	3,507	261	302	563
Sydney, N.S	3,003	2,958	5,961	4,959	393	367	760
Thetford Mines, Que	–	–	–	–	–	–	–
Timmins, Ont	1,973	1,819	3.792	2,871	197	192	389
Toronto, Ont	69,070	65,822	134.892	99,557	12,139	10,810	22,949
Three Rivers, Que	3,586	4,076	7,662	6,679	–	–	–
Valleyfield, Que	960	1,032	1,992	1,783	–	–	–
Vancouver, B.C	21,307	20,335	41,642	37,236	4,020	3,973	7,993
Verdun, Que	4,978	4,947	9,925	8,156	–	–	–
Victoria, B.C	2,978	2,987	5,965	4,372	558	635	1,193
Walkerville, Ont	1,127	1,093	2,220	2,179	284	305	589
Welland, Ont	1,462	1,434	2,896	2,350	249	274	523
Westmount, Que	1,708	1,549	3,257	2,904	–	–	–
Windsor, Ont	8,987	8,419	17,406	13,017	1,575	1,416	2,991
Winnipeg, Man	21,364	20,616	41,980	38,808	3,586	3,848	7,434
Woodstock, Ont	849	854	1,703	2,019	323	388	711

Secondary Education.—In the past quarter of a century the number of pupils of both sexes doing work of secondary grade has shown a very great absolute increase as well as a large increase relative to the number in elementary grades. The available statistics are given by years in Table 5, and show that in each of the provinces and in every year the number of girls in the secondary grades has exceeded the number of boys. The drop in the Ontario figures between 1915 and 1917 is due in part to the change in the statistical year from the calendar year to the natural school year—September to June.

5.—Provincially-Controlled Schools in Canada: Comparative Numbers of Boys and Girls Doing Work of Secondary Grade in each of Seven Provinces, 1901-31.[1]

Year.	N.S.		N.B.[3]		Ontario.		Manitoba.		Sask.		Alberta.		B.C.	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
1901	–	–	–	–	10,869	11,654	–	–	–	–	–	–	215	369
1902	–	–	–	–	11,629	12,843	–	–	–	–	–	–	313	471
1903	–	–	–	–	11,988	13,734	–	–	–	–	–	–	316	540
1904	2,496	4,499	–	–	12,718	14,991	–	–	–	–	–	–	381	600
1905	2,732	4,554	–	–	13,035	15,626	–	–	–	–	–	–	433	657
1906	2,775	4,864	–	–	13,336	16,056	–	–	–	–	–	–	412	763
1907	2,792	4,854	–	–	13,799	16,532	–	–	–	–	–	–	432	823
1908	2,985	4,928	–	–	14,731	17,181	–	–	335	399	–	–	613	857
1909	3,076	5,048	–	–	15,776	17,325	–	–	504	643	–	–	812	997
1910	3,181	5,476	–	–	15,196	17,416	–	–	623	804	–	–	919	1,122
1911	3,211	5,463	–	–	17,073	20,907	–	–	766	927	–	–	940	1,048
1912	3,132	5,536	–	–	17,345	21,022	–	–	885	1,129	–	–	973	1,178
1913	3,175	5,461	–	–	17,718	21,572	–	–	1,028	1,326	–	–	1,232	1,448
1914	3,216	5,687	–	–	19,475	23,060	–	–	1,034	1,622	–	–	1,414	1,593
1915	3,436	6,041	–	–	20,508	24,718	–	–	1,545	2,038	–	–	1,844	2,068
1916	3,466	6,260	–	–	–	–	–	–	1,566	2,283	–	–	2,260	2,510
1917	3,051	6,037	–	–	14,318	19,597	–	–	1,445	2,441	–	–	2,074	2,767
1918	3,082	6,115	–	–	13,342	19,859	–	–	1,523	2,561	–	–	2,151	2,999
1919	3,024	6,114	–	–	15,095	20,643	–	–	1,910	2,841	–	–	2,392	3,414
1920	3,313	6,178	–	–	16,682	21,480	–	–	2,492	3,425	–	–	3,826	3,810
1921	3,425	6,280	–	–	17,525	22,426	3,524	5,091	2,494	3,423	3,088	4,421	3,093	4,166
1922	4,202	6,937	–	–	21,408	25,502	–	–	2,423	3,204	4,707	6,055	3,788	4,846
1923	4,715	7,373	–	–	24,708	28,700	5,367	7,242	5,519	8,028	5,286	6,976	4,046	5,174
1924	4,415	7,217	1,363	2,074	26,417	31,183	–	–	6,604	9,410	5,877	7,569	4,380	5,509
1925	4,696	7,157	1,498	2,171	28,804	33,857	–	–	7,255	10,171	6,321	8,392	4,711	5,886
1926	4,605	7,343	1,535	2,264	29,281	34,175	5,560	7,991	8,140	11,361	6,658	7,795	5,306	6,473
1927	4,498	7,472	1,561	2,474	29,187[2]	33,867[2]	–	–	8,315	11,721	6,846	9,642	6,308	7,545
1928	4,633	7,483	1,637	2,490	31,002[2]	34,884[2]	5,665	8,498	8,497	12,405	7,614	10,604	7,494	8,865
1929	4,809	7,722	1,600	2,544	31,828[2]	35,125[2]	6,458	8,626	9,197	13,397	8,089	11,344	9,350	10,661
1930	4,931	7,984	1,902	2,899	31,847[2]	34,056[2]	6,576	8,586	10,226	14,223	9,232	12,048	9,609	10,900
1931	5,279	8,573	1,947	2,787	33,329[2]	35,278[2]	7,372	9,253	12,212	16,371	10,730	13,536	10,893	11,848

[1] 1924—P.E.I., inc. P.W.C., 719–1,113; 1925—P.E.I., inc. P.W.C., 669–1,087; 1926—P.E.I., inc. P.W.C. 704–1,070; 1927—P.E.I., inc. P.W.C., 669–1,132; 1928—P.E.I., inc. P.W.C., 620–1,216; 1929—P.E.I., inc. P.W.C., 716–1,217; 1930—P.E.I., inc. P.W.C., 696–1,152; 1931—P.E.I., inc. P.W.C., 982-1,582. [2] Includes the pupils of continuation schools, high schools and collegiate institutes only. In the school year 1931, in all secondary grades reported, there were approximately 50,011 boys and 53,309 girls. These included full-time day vocational, public and separate schools. The figures in the tables are, for comparative purposes, confined to continuation and high schools and collegiate institutes. [3] The figures given for New Brunswick are approximate.

Subjects of Instruction in Secondary Grades.—The subjects taken in the elementary grades of the provincially-controlled schools are settled by the curricula, but in the secondary grades there are usually options appealing to different types of pupils, wishing to follow different callings. Statistics of the subjects taken by pupils in secondary grades in 1930, available for six provinces, were presented in the Canada Year Book, 1932, p. 843, showing among other things the small number of pupils taking Greek and German and the high proportion studying French and Latin. The "Annual Survey of Education in Canada, 1931", shows in detail the changes in the subjects chosen in recent years by secondary grade pupils in the different provinces.

Vocational and Technical Education.—The introduction of technical and vocational courses in the high school curricula has received strong stimuli in recent years from the Technical Education Acts of 1919, 1929 and 1931, under the terms of which the Dominion Government undertook to provide subsidies to the provinces to encourage the growth of technical instruction. From the outset evening classes during the winter months have been an important part of the work of the technical schools. The number of students in institutions for technical education coming within the scope of the Technical Education Act of 1919 (9-10 Geo. V, c. 73) in the academic years ended June 30, was as follows: 1921, 56,774; 1922, 61,961; 1923, 70,300; 1924, 79,829; 1925, 88,024; 1926, 88,961; 1927, 96,682; 1928, 109,008; 1929, 121,252. In the years since 1929 not all provinces have been receiving grants, but Table **6** provides a record of pupils receiving instruction of a technical character in the publicly-controlled schools of the Dominion in 1931.

6.—Enrolment in Publicly-Controlled Vocational Schools in Canada, by Provinces, School Year ended June 30, 1931.

Province.	Full-time Day Students. Commercial.	Full-time Day Students. Other than Commercial.	Full-time Day Students. Total.	Part-time and Short Course Students.	Evening Students.
Prince Edward Island	24	–	24	1,116	–
Nova Scotia	58	21	79	3,614	2,667
New Brunswick	490	925	1,415	68	2,004
Quebec[1]	–	7,775	7,775	671	51,276
Ontario[2]	15,328	14,219	29,547	3,334	47,440
Manitoba	3,246	169	3,415	140	2,732
Saskatchewan	1,211	146	1,357	22	1,908
Alberta	1,219	1,815	3,034	179	1,811
British Columbia	2,792	3,064	5,856	–	7,167
Totals	**24,368**	**28,134**	**52,502**	**9,144**	**117,005**

[1] This table does not include students in commercial courses in Quebec who, it will be noted, constitute the most numerous group in other provinces. In Quebec statistics they are included with the high schools, classical colleges, etc. Moreover, this table comes far short of demonstrating the full importance of technical or vocational training in Quebec for another reason. All of the work in the Catholic schools in advance of the elementary years (*i.e.* the five complementary and superior years, including about 25,000 pupils) has a strong vocational character. Apart from certain compulsory general subjects in these years optional subjects are grouped in four vocational sections, in one of which each pupil studies. [2] Enrolment in Ontario schools is not for the full year but for a certain day—the last school day in May.

Teaching Staffs.—As shown in Table 1, the teaching staffs of Canadian schools consisted in 1931 of 71,246 teachers, 14,743 males and 56,503 females. The "Annual Survey of Education in Canada, 1931" deals in detail with the classification of these teachers, the rates of salary paid and the teaching experience. Table 7 summarizes statistics regarding rates of salary, as far as these are available.

7.—Average Annual Salaries of School Teachers, by Provinces, 1930-31, or Latest Year Reported.

Province and Class of Certificate.	Male.	Female.
	$	$
Prince Edward Island, 1931—		
First class	797	653
Second class	552	503
Third class	470	416
Nova Scotia, 1931—		
All schools	754	
Quebec, 1930—		
Religious teachers	571	383
Lay teachers—		
Catholic schools	1,641	397
Protestant schools	2,540	1,120
Catholic and Protestant schools	1,828	543
Ontario, 1930—		
Public schools—		
Rural	1,208	1,008
City	2,304	1,501
Town	1,815	1,121
Village	1,407	1,045
Separate schools—		
Rural	970	883
City	947	750
Town	1,024	723
Village	1,000	932
Totals, public and separate	1,651	1,112
High schools and collegiate institutes, 1931—		
Principals	3,365	
Assistants	2,756	2,200
Continuation schools, 1931—		
Principals	1,845	
Assistants	1,395	1,329

Province and Class of Certificate.	Male.	Female.
	$	$
New Brunswick, 1931—		
First class	1,275	942
Second class	696	661
Third class	519	520
Superior schools	1,396	
Grammar schools	2,187	
Saskatchewan, 1931—		
Rural schools—		
First class	898	864
Second class	893	845
Third class	921	850
Others	–	–
All classes	895	851
Cities, towns and villages—		
First class	1,511	1,112
Second class	1,214	1,028
Third class	–	–
Others	–	–
All classes	1,443	1,065
Collegiate Institutes and High Schools	2,552	2,001
Alberta, 1931—		
First class	1,688	1,256
Second class	1,176	1,096
Third class	976	971
Permit and pending[1]	1,716	1,580
Specialist	2,431	2,010
British Columbia, 1931—		
High schools	2,335	
Cities	1,547	
Rural municipalities	1,261	
Rural and assisted	1,105	
All schools	1,534	

[1] Teachers with certificates from other provinces.

Teachers in Training.—Detailed information regarding male and female teachers in training in 1930-31 is given in the Bureau of Statistics' "Annual Survey of Education in Canada, 1931". A summary of the number of teachers in training in each year from 1902 to 1931 is furnished by provinces in Table 8.

8.—Provincially-Controlled Schools in Canada: Number of Teachers in Training in Normal Schools and Colleges, by Provinces, 1902-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1902	–	182	269	420	1,922	320	–	–	–	3,113
1903	–	145	224	460	1,861	319	–	–	–	3,009
1904	–	191	288	392	1,592	390	–	–	–	2,853
1905	–	148	285	416	1,685	491	–	–	–	3,025
1906	–	154	307	423	2,286	476	188	102	–	3,936
1907[1]	–	–	–	–	–	–	–	–	–	–
1908	–	161	334	526	1,788	410	229	140	–	3,588
1909	–	215	343	715	1,410	448	411	182	–	3,724
1910	–	260	358	787	1,510	503	447	218	–	4,083
1911	–	268	370	840	1,474	628	241	248	–	4,069
1912	–	293	376	836	1,513	–	580	278	–	3,876
1913	–	302	358	1,088	1,436	529	643	292	–	4,648
1914	–	318	357	1,270	1,563	581	886	357	–	5,332
1915	–	355	351	1,312	1,425	672	1,222	601	–	5,938
1916	–	388	372	1,357	1,819	737	911	438	–	6,022
1917	–	263	372	1,361	1,438	599	1,081	334	335	5,783
1918	–	260	287	1,339	1,676	513	621	467	365	5,528
1919	–	255	263	1,223	1,659	554	1,058	297	425	5,734
1920	220	228	263	1,502	1,959	593	723	413	404	6,305
1921	241	241	216	1,376	2,221	642	899	411	377	6,624
1922	341	356	358	1,389	2,684	790	1,462	536	685	8,601
1923	347	353	451	1,555	3,131	637	1,571	1,004	672	9,721
1924	338	682	442	1,623	3,392	695	1,621	669	639	10,101
1925	297	760	430	1,771	2,611	695	1,702	613	563	9,442
1926	299	692	376	1,854	2,786	636	1,655	774	453	9,525
1927	243	680	344	1,884	2,441	626	1,514	721	335	8,788
1928	215	600	321	1,950	2,679	614	1,458	692	375	8,904
1929	195	538	345	1,921	1,734	536	2,677	789	339	9,074
1930	219	615	311	2,075	1,838	549	1,317	811	432	8,167
1931	245	734	315	2,173	2,119	570	1,303	981	526	8,966

[1] The data for 1907 are incomparable and have been omitted. In recent years several universities have added teacher-training departments, in most cases for university graduates who are trained for teaching positions in the secondary schools. These are included in the figures for 1930 and 1931.

Receipts and Expenditures.—The total receipts and expenditures of the provincially-controlled schools of the different provinces are published for recent years in Table 9. Figures for the receipts in British Columbia and for expenditures in Prince Edward Island, Nova Scotia, New Brunswick and Quebec are not available.

9.—Canadian Provincially-Controlled Schools: Receipts and Expenditures, by Provinces, 1927-31.

NOTE.—For other years back to 1901, see the 1921 Year Book, pp. 148–153 and the 1932 Year Book, pp. 845–848.

Year.	P.E.I.[2]—Receipts.			N.S.[2]—Receipts.			
	Govt. Grants.	Local Assessment.	Total Receipts.	Govt. Grants.	Municipal Funds.	Local Assessment.	Total Receipts.
	$	$	$	$	$	$	$
1927	284,313	174,164	458,477	688,081	524,196	2,393,125	3,605,402
1928	294,037	179,004	473,041	752,858	523,967	2,504,390	3,781,215
1929	297,369	187,769	485,138	875,007	523,762	2,549,461	3,948,230
1930	306,390	189,669	496,059	916,856	523,876	2,529,293	3,970,025
1931	321,508	189,444	510,952	1,012,681	523,834	2,657,780	4,194,295

For footnotes see end of table, p. 979.

9.—Canadian Provincially-Controlled Schools: Receipts and Expenditures, by Provinces, 1927-31[1]—continued.

Year.	N.B.[2]—Receipts.				Que.[1],[2]—Receipts.		
	Govt. Grants.	Municipal Funds.	Local Assessment.	Total Receipts.	Govt. Grants.	Assessment and Other Sources.	Total Receipts.
	$	$	$	$	$	$	$
1927	445,014	212,350	2,413,951	3,071,315	3,983,753	25,823,854	29,807,607
1928	471,759	212,616	2,337,740	3,022,115	4,152,312	26,729,566	30,881,878
1929	478,964	227,728	2,361,978	3,068,670	4,952,778	27,964,711	32,917,489
1930	495,886	212,172	2,405,890	3,113,948	5,906,164	28,656,366	34,562,530
1931	511,850	228,117	2,467,510	3,207,477	-	-	-

ONTARIO—Receipts.[1]

Year.	Elementary Schools.				Secondary Schools.		Grand Total.
	Govt. Grants.	Local Assessment.	Clergy Reserve Fund and Other Sources.	Total.	Govt. Grants.	Total.	
	$	$	$	$	$	$	$
1927	3,404,647	25,621,542	12,559,917	41,586,106	1,533,930	15,957,378	57,543,484
1928	3,508,408	26,159,067	13,128,485	42,795,960	1,594,070	17,811,614	60,607,574
1929	3,686,301	27,274,660	13,527,345	44,488,306	1,711,145	21,211,031	65,699,337
1930	3,753,499	29,151,682	14,941,612	47,846,793	1,845,379	23,800,321	71,647,114

ONTARIO—Expenditures.[1]

Year.	Elementary Schools.					Secondary Schools.	Grand Total.
	Teachers' Salaries.	Sites, etc.	Apparatus, etc.	Rents, etc.	Total.		
	$	$	$	$	$	$	$
1927	19,006,316	4,011,025	532,127	11,249,702	34,799,170	13,711,045	48,510,215
1928	19,490,562	3,821,743	537,116	11,645,816	35,495,237	16,894,437	52,389,674
1929	19,998,964	4,083,218	634,703	12,238,762	36,955,647	18,051,352	55,006,999
1930	20,502,972	4,753,237		15,051,056	40,307,265	21,667,826	61,975,091

MANITOBA—Receipts.

Year.	Legislative Grants.	Municipal Taxes.	Debentures.	Promissory Notes.	Sundries.	Balance from Previous Years.	Total.
	$	$	$	$	$	$	$
1927	1,110,575	7,365,798	369,721	1,090,556	275,718	960,332	11,172,700
1928	1,191,924	7,555,561	568,937	854,367	230,025	918,915	11,319,729
1929	1,208,809	7,611,029	408,897	877,474	186,088	911,043	11,203,340
1930	1,285,898	7,821,988	446,115	1,770,920	219,540	814,368	12,358,829
1931	1,310,587	7,675,879	1,071,272	1,043,975	490,447	738,137	12,330,297

For footnotes see end of table, p. 979.

9.—Canadian Provincially-Controlled Schools: Receipts and Expenditures, by Provinces, 1927-31[1]—continued.

MANITOBA—Expenditures.

Year.	Teachers' Salaries.	Building, etc.	Fuel, etc.	Repairs and Caretaking.	Secretary-Treasurers' Salaries.
	$	$	$	$	$
1927	4,984,111	718,348	396,217	658,723	223,287
1928	5,063,926	597,183	415,257	684,528	203,226
1929	5,167,687	683,747	385,406	693,074	171,882
1930	5,329,498	1,222,272	425,633	743,418	167,692
1931	5,387,400	795,142	370,399	771,922	164,197

Year.	Principal of Debentures.	Interest on Debentures.	Promissory Notes.	Other Expenditures.	Total.
	$	$	$	$	$
1927	613,671	683,883	1,067,836	903,400	10,249,476
1928	633,097	683,714	1,178,688	925,077	10,384,696
1929	639,916	684,765	982,903	996,925	10,406,305
1930	651,551	694,929	1,301,332	1,091,074	11,627,399
1931	1,306,476	693,704	1,251,946	974,239	11,715,425

SASKATCHEWAN—Receipts.[1]

Year.	Elementary Schools.					Secondary Schools.		Grand Total.
	Govt. Grants.	Local Assessments.	Debentures.	Other Sources.	Total.	Govt. Grants.	Total.	
	$	$	$	$	$	$	$	$
1927	2,141,290	10,415,005	1,300,862	2,133,815	15,990,972	199,246	760,776	16,751,748
1928	2,193,889	10,874,672	1,217,825	1,981,025	16,267,411	208,732	778,302	17,045,713
1929	2,534,024	11,010,661	1,284,651	2.208,983	17,038,319	292,676	981,183	18,019,502
1930	2,406,092	10,163,293	1,410,712	1,906,232	15,886,329	357,812	1,305,703	17,192,032

SASKATCHEWAN—Expenditures.[1]

Year.	Elementary Schools.						Secondary Schools.		Grand Total.
	Teachers' Salaries.	Debentures.	Notes (renewals and interest).	School Bldgs. and Grounds.	Other Expenditure.	Total Expenditure.	Teachers' Salaries.	Total.[3]	
	$	$	$	$	$	$	$	$	$
1927	7,184,460	1,459,629	1,815,173	2,116,041	3,342,366	15,917,669	508,772	843.179	16,760,848
1928	7,484,752	1,526,298	1,670,769	2,231.260	3,501,765	16,414,844	539,105	797,373	17,212,217
1929	7,809.073	1,590,757	1,788.318	2,169,375	3,595,149	16,952,672	593,186	1,276,134	18,228,806
1930	7,889,070	1,578,469	1,445,643	2,022,775	3,541,297	16,477,254	641,551	1,928,073	18,405,327

For footnotes see end of table, p. 979.

9.—Canadian Provincially-Controlled Schools: Receipts and Expenditures, by Provinces, 1927-31[1]—concluded.

ALBERTA—Receipts.[1]

Year.	Govt. Grants.	Local Assess-ments.	Deben-tures.	Notes.	Other Sources.	Total.
	$	$	$	$	$	$
1927	1,218,573	8,901,979	503,130	967,530	333,931	11,925,143
1928	1,321,158	9,279,494	1,097,006	1,241,062	391,368	13,330,688
1929	1,355,963	9,419,440	1,543,704	1,364,173	459,582	14,142,862
1930	1,593,995	8,854,951	1,335,699	1,491,338	420,808	13,696,791

ALBERTA—Expenditures.[1]

Year.	Teachers' Salaries.	Officials' Salaries.	Debentures.	Notes.	Buildings.	Other Expendi-tures.	Total Expendi-tures.
	$	$	$	$	$	$	$
1927	5,899,839	332,115	1,211,234	1,278,206	980,704	2,005,890	11,707,988
1928	6,243,085	357,525	1,228,138	1,170,050	1,806,269	2,231,799	13,036,866
1929	6,586,974	350,427	1,287,395	1,575,483	2,097,582	2,498,688	14,396,549
1930	6,847,412	338,977	1,305,609	1,495,459	1,565,341	2,497,726	14,050,524

BRITISH COLUMBIA[4]—Expenditures.

Year.	Local Assessments.				Provincial Govern-ment.[5]	Grand Total.[5]
	Cities.	Rural Munici-palities.	Other Rural.	Total.		
	$	$	$	$	$	$
1927	3,269,522	1,992,573	507,692	5,769,787	3,402,941[5]	9,172,728[5]
1928	3,368,253	1,843,283	517,040	5,728,576	3,532,519[5]	9,261,095[5]
1929	5,806,030	1,025,482	552,563	7,384,075	3,765,921[5]	11,149,996[5]
1930	4,549,067	1,120,718	595,154	6,264,939	3,743,317[5]	10,008,256[5]
1931	4,551,940	1,035,843	638,878	6,226,661	3,834,727[5]	10,061,388[5]

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[1] The latest figures for Quebec, Ontario, Saskatchewan and Alberta are for 1930.

[2] Figures of expenditures are not available for Prince Edward Island, Nova Scotia, New Brunswick and Quebec.

[3] These totals do not include promissory notes.

[4] Figures for British Columbia do not include receipts.

[5] Including grants to provincial university as follows: 1927, $531,875; 1928, $545,917; 1929, $564,425; 1930, $606,825; 1931, $547,450.

Subsection 2.—Higher Education.

The tables of this subsection are intended to include all institutions in the Dominion offering instruction in courses that are the equivalent of at least two years in advance of matriculation. The affiliated colleges of each university are shown along with it, except where they are situated in another province. In the tables following, the name of each institution is given in the language (French or English) used therein as the main language of instruction. Table **10** gives a summary of the degrees and diplomas granted by the different universities and colleges of Canada, and Table **11** shows the students attending the faculties and courses of instruction offered in each institution.

Students of University Grade.—The aggregate number of students in attendance was reported as 77,618. Of these, 41,168 were of university grade (*i.e.*, following courses for which matriculation was prerequisite) and 34,033 were in attendance at the regular sessions. They were enrolled in 153 different colleges or universities. Of those attending the full sessions 32,783 were undergraduates, while 1,250 were graduate students, *i.e.*, working toward a higher degree in a subject in which they already held a bachelor's degree. Many of the larger numbers classed as undergraduates actually held degrees, but not in the subject or faculty in which they were studying during the session under consideration.

More than half of all students, or 18,134, are in arts and pure science or what are commonly termed "academic" courses as distinguished from "professional" courses. One or two years of arts is prerequisite to many of the professional courses, in French-language Quebec the full four years. Next to arts and science come engineering and applied science with 3,554 students; medicine, 2,949; theology, 2,192; agriculture, 1,277; commerce and accounting, 1,103; law, 842; household science, 995; education, 667; public health and nursing, 650; pharmacy, 475; dentistry, 404; music, 220; forestry, 136; veterinary science, 122; architecture, 137; etc.

As shown in Table **10**, there were 3,614 bachelor degrees granted to men and 1,224 to women, 525 diplomas to men and 773 to women. Some of the latter represent completion of courses similar to those for bachelor degrees. The graduate degrees granted included 447 master degrees or licences to men and 95 to women, the term "licentiate" being used by the universities of Laval, Montreal and Ottawa in place of the term "master". Those completing the doctorate were 35 men and 7 women, while honorary doctor degrees were conferred on 76 men.

10.—Universities and Colleges of Canada: Summary of Degrees and Diplomas Granted, 1930-31.

University or College.	Diplomas and Certificates.		Bachelor.[3]		Master and Licence.[4]		Doctor.[3,5]		Totals.		
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Dalhousie—King's[1]	12	6	128	42	7	5	1	–	148	53	201
Acadia	20	22	56	40	5	1	7	–	88	63	151
St. Francis Xavier	8	5	21	7	7	2	–	–	36	14	50
New Brunswick	–	–	43	11	–	5	–	–	43	16	59
Mount Allison	9	3	41	21	–	–	5	–	55	24	79
St. Joseph's	20	–	18	–	5	–	3	–	46	–	46
McGill	6	67	349	89	49	18	13	–	417	174	591
Bishop's	4	10	20	11	8	2	4	–	36	23	59
Laval (1930)	71	181	345	1	37	–	1	–	454	182	636
Montreal	55	15	424	35	90	1	–	–	569	51	620
Toronto	15	111	892	349	88	27	23	6	1,018	493	1,511
Victoria[2]	24	–	16	–	–	–	4	–	44	–	44
Trinity[2]	–	–	1	–	1	–	4	–	6	–	6
Western	–	14	114	62	11	5	4	–	129	81	210
Queen's	–	–	231	99	14	8	15	–	260	107	367
Ottawa	–	–	71	5	32	1	4	–	107	6	113
McMaster	–	2	46	16	6	1	–	–	52	19	71
Manitoba	35	9	232	140	16	8	4	1	287	158	445
Saskatchewan	53	30	100	71	16	3	3	–	172	104	276
Alberta	17	27	171	56	17	2	1	–	206	85	291
British Columbia	32	40	164	148	21	6	–	–	217	194	411
Other Institutions	144	231	131	21	17	–	15	–	307	252	559
Totals	**525**	**773**	**3,614**	**1,224**	**447**	**95**	**111**	**7**	**4,697**	**2,099**	**6,796**

[1] All degrees except those in theology granted by Dalhousie.

[2] All degrees except those in theology entered opposite Toronto.

[3] Medical, dental and veterinary doctors included in "bachelor" column.

[4] The licence in the French-speaking universities is the next degree in advance of bachelor, as the master degree is in the English-speaking.

[5] Seventy-six of the doctor degrees were honorary.

Students not of University Grade.—The 41,168 students of post-matriculation standard represent little more than half of the total enrolment in universities and colleges. Many of the arts colleges, especially the classical colleges of Quebec offer preparatory courses in which instruction is given in the high school grades, or even elementary grades. These accounted for 19,845 students, practically all of whom were in regular attendance at the full session.

The remaining 16,615 of the enrolment, 7,873 men and 8,742 women, were not following high school courses, but could not be classed as university-grade students as they had not necessarily matriculated. A minority of them attended the full session, generally studying music, household science or agriculture. The remainder were the students of summer courses in teaching methods, series of evening extension lectures, correspondence and other extra-mural courses, agricultural and other short courses.

Apart from the reported enrolment many thousands of people were reached by extension lectures that were not grouped in series and reported as courses, and still larger numbers reached by university radio broadcasts, travelling libraries, agricultural assistance and various other forms of extension service. These activities were reviewed in the "Annual Survey of Education in Canada, 1929".

Teaching Staff.—At pp. 858 to 861 of the 1932 Year Book there was published an analysis of the teaching staffs of universities and colleges as in 1929-30, by sex and by full time or part time. A corresponding table for 1930-31 will be found at p. 113 of the "Annual Survey of Education in Canada, 1931".

11.—Universities and Colleges of Canada: Full Time Students

No.	University or College.	Undergraduate.							
		Arts.	Pure Science.	Agriculture.	Architecture.	Commerce.	Dentistry.	Education.	Engineering and Applied Science.
1	Prince of Wales (1930)	30	–	–	–	–	–	–	–
2	St. Dunstan's	78	–	–	–	–	–	–	–
3	Acadia	248	[3]	–	–	–	–	27	67
4	Dalhousie	347	109	–	–	75	27	[3]	60
5	King's	68	12	–	–	–	–	–	–
6	St. Francis Xavier	150	47	–	–	–	–	[3]	32
7	St. Mary's	43	–	–	–	–	–	–	29
8	Ste. Anne	28	–	–	–	–	–	–	–
9	St. Vincent	72	–	–	–	26	–	–	–
10	Holy Heart	–	–	–	–	–	–	–	–
11	Pine Hill	–	–	–	–	–	–	–	–
12	Nova Scotia Agricultural	–	–	32	–	–	–	–	–
13	Nova Scotia Technical	–	–	–	–	–	–	–	59
14	Maritime Pharmacy	–	–	–	–	–	–	–	–
15	Sacré Cœur	52	–	–	–	–	–	–	–
16	St. Joseph's	88	–	–	–	–	–	–	–
17	Mt. Allison	229	63	–	–	7	–	[3]	58
18	New Brunswick	140	38	–	–	–	–	–	124
19	Bishop's	120	–	–	–	–	–	15	–
20	McGill	662	276	141	44	250	34	[3]	308
21	Macdonald	–	–	68	–	–	–	–	–
22	Presbyterian	23	–	–	–	–	–	–	–
23	Diocesan	19	–	–	–	–	–	–	–
24	United	34	–	–	–	–	–	–	–
25	Montreal (Facultés de l'université)	–	132	–	–	–	67	–	–
26	Ecole Polytechnique	–	–	–	–	–	–	–	215
27	Ecole des H. Etudes Commerciales	–	–	–	–	167	–	–	–
28	Oka	–	–	134	–	–	–	–	–
29	Ecole de médecine vétérinaire	–	–	–	–	–	–	–	–
30	Instituts pédagogiques	–	–	–	–	–	–	55	–
31	14 collèges classiques	1,654	–	–	–	–	–	–	–
32	Marguerite Bourgeoys	133	–	–	–	–	–	–	–
33	Ecoles annexées	–	–	–	–	–	–	–	–
34	Laval (Facultés de l'université), 1930	14	–	–	–	–	–	–	–
35	7 grands séminaires	–	–	–	–	–	–	–	–
36	Académie Commerciale	–	–	–	–	212	–	–	–
37	Arthabaska	–	–	–	–	–	–	16	–
38	Ste. Anne de la Pocatière	–	–	114	–	–	–	–	–
39	11 collèges classiques	1,184	–	–	–	–	–	–	–
40	Collège de Jésus-Marie	14	–	–	–	–	–	–	–
41	Ecoles de gardes-malades	–	–	–	–	–	–	–	–
42	Couvents	–	–	–	–	–	–	–	–
43	Institutions classiques non-affiliées	427	–	–	–	–	–	–	–
44	Institutions supérieures non-affiliées	39	–	–	–	–	–	–	–
45	Ottawa	180	–	–	–	–	–	–	–
46	Sacré Cœur	42	–	–	–	–	–	–	–
47	Western	795	[3]	–	–	–	–	–	–
48	Assumption	125	–	–	–	–	–	–	–
49	Alma	12	–	–	–	–	–	–	–
50	Huron	18	–	–	–	–	–	–	–
51	Ursuline	83	–	–	–	–	–	–	–
52	Waterloo	36	–	–	–	–	–	–	–
53	Queen's	711	[3]	–	–	222	–	–	456
54	McMaster	367	[3]	–	–	[3]	–	–	–
55	Royal Military	–	–	–	–	–	–	–	200
56	Osgoode Hall	–	–	–	–	–	–	–	–
57	Margaret Eaton (Physical Training)	–	–	–	–	–	–	–	–
58	St. Augustine's	–	–	–	–	–	–	–	–
59	Mount Carmel	38	–	–	–	–	–	–	–
60	Rédemptoristes	–	–	–	–	–	–	–	–
61	St. Jerome's	38	–	–	–	–	–	–	–
62	University of Toronto[1]	3,131	[3]	–	[6]	[3]	244	410	850
63	Emmanuel and Victoria	941	–	–	–	–	–	–	–
64	Trinity	306	–	–	–	–	–	–	–
65	St. Michael's	310	–	–	–	–	–	–	–
66	Knox	40	–	–	–	–	–	–	–
67	Wycliffe	34	–	–	–	–	–	–	–

For footnotes see end of table pp 984-985.

of the Regular Session, by Faculties, 1930-31.

Undergraduate.—continued.												Graduate.			Others.		No.
Forestry.	Household Science.	Law.	Medicine.	Music.	Public Health and Nursing.	Pharmacy.	Social Service.	Theology and Philosophy.	Veterinary Science.	Others.	Total (Excluding Duplicates).	Arts and Science.	Theology.	Total.	Pre-matriculation.	Total.	
–	–	–	–	–	–	–	–	–	–	–	30	–	–	–	306	306	1
–	–	–	–	–	–	–	–	–	–	–	78	–	–	–	68	68	2
–	75	–	–	20	–	–	–	32	–	48	507	17	–	17	75	95	3
–	–	55	171	3	–	12	–	–	–	9	868	13	–	13	–	–	4
–	–	–	–	–	–	–	–	5	–	–	85	–	–	–	–	–	5
–	4	–	–	–	–	–	–	–	–	–	233	9	–	9	36	36	6
–	–	–	–	–	–	–	–	–	–	–	72	–	–	–	155	155	7
–	–	–	–	–	–	–	–	–	–	–	28	–	–	–	99	99	8
–	3	–	–	12	–	–	–	–	–	–	113	1	–	1	–	–	9
–	–	–	–	–	–	–	–	71	–	–	71	–	–	–	–	–	10
–	–	–	–	–	–	–	–	23	–	–	23	–	3	3	–	1	11
–	–	–	–	–	–	–	–	–	–	–	32	–	–	–	–	–	12
–	–	–	–	–	–	–	–	–	–	–	59	–	–	–	–	–	13
–	–	–	–	–	–	8	–	–	–	–	8	–	–	1	–	2	14
–	–	–	–	–	–	–	–	–	–	–	52	–	–	–	228	228	15
–	–	–	–	–	–	–	–	2	–	–	90	–	–	–	324	324	16
–	26	–	12	1	–	–	–	–	–	–	396	5	–	5	–	–	17
49	–	11	–	–	–	–	–	–	–	–	362	–	–	–	–	–	18
–	–	–	–	–	–	–	–	32	–	–	167	–	–	–	–	–	19
–	77	98	471	184	37	7	30	–	–	39	2,658	215	–	241	–	–	20
–	27	–	–	–	–	–	–	–	–	–	95	–	–	–	–	208	21
–	–	–	–	–	–	–	–	18	–	–	41	–	2	2	5	5	22
–	–	–	–	–	–	–	–	2	–	–	21	2	2	4	15	15	23
–	–	–	–	–	–	–	–	27	–	–	61	4	–	4	20	20	24
–	–	214	219	–	79	–	–	302	–	–	1,012	–	–	–	–	–	25
–	–	–	–	–	–	–	–	–	–	–	215	–	–	–	–	–	26
–	–	–	–	–	–	–	–	–	–	–	167	–	–	–	–	–	27
–	–	–	–	–	–	–	–	–	–	–	134	–	–	–	–	16	28
–	–	–	–	–	–	–	–	–	25	–	25	–	–	–	–	–	29
–	–	–	–	–	–	–	–	–	–	–	55	–	–	–	–	2	30
–	–	–	–	–	–	–	–	–	–	–	1,654	–	–	–	4,319	4,319	31
–	–	–	–	–	–	–	–	–	–	–	133	–	–	–	–	532	32
–	–	–	–	–	16	–	–	–	–	–	16	–	–	–	1,745	2,345	33
25	–	77	2[illegible]	–	–	7	–	184	–	–	564	48	42	97	–	–	34
–	–	–	–	–	–	–	–	148	–	–	148	–	–	–	–	–	35
–	–	–	–	–	–	–	–	–	–	–	212	–	–	–	–	–	36
–	–	–	–	–	–	–	–	–	–	–	16	–	–	–	–	–	37
–	–	–	–	–	–	–	–	–	–	–	114	–	–	–	–	65	38
–	–	–	–	–	–	–	–	–	–	–	1,184	–	–	–	3,387	3,387	39
–	–	–	–	–	–	–	–	–	–	–	14	–	–	–	4	51	40
–	–	–	–	–	325	–	–	–	–	–	325	–	–	–	–	–	41
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3,539	3,539	42
–	–	–	–	–	–	–	–	–	–	–	427	–	–	–	490	490	43
–	–	–	–	–	–	–	–	467	–	–	503	–	–	–	–	–	44
–	–	–	–	–	–	–	–	207	–	–	361	–	6	18	595	671	45
–	–	–	–	–	–	–	–	–	–	–	42	–	–	–	116	116	46
–	–	–	219	–	16	–	–	–	–	–	1,030	3	–	3	–	–	47
–	–	–	–	–	–	–	–	2	–	–	127	3	–	3	375	380	48
–	–	–	–	–	–	–	–	–	–	–	12	–	–	–	72	108	49
–	–	–	–	–	–	–	–	3	–	–	21	–	–	–	–	–	50
–	–	–	–	–	–	–	–	–	–	–	83	–	–	–	8	8	51
–	–	–	–	–	–	–	–	3	–	–	39	–	–	–	18	25	52
–	–	–	302	–	–	–	–	18	–	21	1,730	27	–	35	–	–	53
–	–	–	–	–	–	–	–	18	–	–	385	–	–	–	27	27	54
–	–	–	–	–	–	–	–	–	–	–	200	–	–	–	–	–	55
–	–	249	–	–	–	–	–	–	–	–	249	–	–	–	–	–	56
–	–	–	–	–	–	–	–	–	–	27	27	–	–	–	–	24	57
–	–	–	–	–	–	–	–	202	–	–	202	–	–	–	–	–	58
–	–	–	–	–	–	–	–	–	–	–	38	–	–	–	112	112	59
–	–	–	–	–	–	–	–	28	–	–	28	–	–	–	–	–	60
–	–	–	–	–	–	–	–	–	–	–	38	–	–	–	124		
62	228	3	813	–	48	250	70	–	–	75	6,124	422	–	455			
–	–	–	–	–	–	–	–	67	–	–	1,008	–	2				
–	–	–	–	–	–	–	–	18	–	–	324	–	–				
–	–	–	–	–	–	–	–	47	–	–	357	19	–				
–	–	–	–	–	–	–	–	20	–	–	60	–					
–	–	–	–	–	–	–	–	33	–	–	67	1					

Since
comparatively
group—mainly Pro-
Church contributions

12.—Universities and Colleges of Canada:

NOTE.—When using the bold face provincial and grand totals, the foot-

No.	University or College.	Assets.			
		Value of Endowments and Investments.	Value of Lands, Buildings, and Equipment.	Value of Other Property.	Total Assets.
		$	$	$	$
1	Prince of Wales (1930)	–	400,000	–	400,000
2	St. Dunstan's	35,000	315,000	26,000	376,000
3	**Totals, Prince Edward Island**	**35,000**	**715,000**	**26,000**	**776,000**
4	Acadia	1,280,556	1,630,127	230,159	3,140,842
5	Dalhousie	2,531,069	2,460,000	–	4,991,069
6	King's	160,979	487,164	–	648,140
7	St. Francis Xavier	443,667	520,000	427,000	1,390,667
8	St. Mary's	–	175,000	–	175,000
9	Ste-Anne	–	225,000	3,000	228,000
10	Pine Hill	289,035	156,935	–	445,970
11	Nova Scotia Agricultural	–	325,000	–	325,000
12	Nova Scotia Technical	–	500,000	–	500,000
13	Maritime Pharmacy	1,029	4,218	–	5,247
14	Holy Heart	–	300,000	–	300,000
15	**Totals, Nova Scotia**[2]	**4,706,332**	**6,783,444**	**660,159**	**12,149,935**
16	Sacré-Coeur	–	260,000	10,000	270,000
17	St. Joseph	–	536,820	41,800	578,620
18	Mt. Allison	587,832	957,336	–	1,545,168
19	New Brunswick	25,000	1,000,000	600,000	1,625,000
20	**Totals, New Brunswick**	**612,832**	**2,754,156**	**651,800**	**4,018,788**
21	Bishop's	6,827	300,000	–	306,827
22	McGill	18,566,463	12,826,845	–	31,393,308
23	Macdonald	4,250,000	3,250,000	–	7,500,000
24	Presbyterian	280,000	170,000	–	450,000
25	Diocesan	368,747	105,944	–	474,691
26	United	468,292	429,500	–	897,792
27	Montreal (Univ. faculties, except theology)	221,366	7,270,753	627,257	8,119,376
28	Ecole Polytechnique	–	700,565	80,404	780,969
29	Ecole des Hautes Etudes Commerciales	–	900,000	–	900,000
30	Oka	–	238,390	–	238,390
31	Institut péd. et Marguerite Bourgeoys	–	600,000	–	600,000
32	14 collèges classiques	–	11,722,000	–	11,722,000
33	Ecoles annexées (no report)	–	–	–	–
34	Laval (Univ. faculties, except theology)	2,289,822	2,000,000	–	4,289,822
35	Ste-Anne de la Pocatière	–	443,000	–	443,000
36	11 collèges classiques	–	8,774,500	–	8,774,500
37	Collège de Jésus-Marie	–	1,010,100	–	1,010,100
38	Autres institutions affiliées (no report)	–	–	–	–
39	Institutions non affiliées (no report)	–	–	–	–
40	**Totals, Quebec**	**26,451,517**	**50,741,517**	**707,661**	**77,900,775**
41	Ottawa	65,905	1,024,585	–	1,090,490
42	Sacré-Coeur, Sudbury	50,000	250,000	50,000	350,000
43	University of Western Ontario	507,872	2,218,101	8,671	2,734,644
44	Assumption	–	800,000	100,000	900,000
45	Alma	8,000	250,000	–	258,000
46	Huron	180,695	150,000	7,000	337,695
47	Ursuline	–	402,650	–	402,650
48	Waterloo and Evangelical Lutheran	23,564	127,117	–	150,681
49	Queen's	2,228,824	5,000,000	–	7,228,824
50	McMaster	1,551,558	1,472,546	–	3,024,104
51	Royal Military		No valuation compiled.		
52	Osgoode Hall, St. Augustine's, Rédemptoristes (no reports)	–	–	–	–
53	Mount Carmel	–	1,250,000	–	1,250,000
54	St. Jerome's	–	350,000	–	350,000

For footnotes see end of table, pp. 988-989.

Financial Statistics, 1930-31.

notes to the items which influence them should be taken into consideration.

Receipts.					Expenditures.			No
From Investments.	From Governments and Municipalities.	From Fees.[6]	From Other Sources.[7]	Total Income.	Current.	Capital.	Total.	
$	$	$	$	$	$	$	$	
–	26,389	1,700	–	28,089	28,089	–	28,089	1
900	–	2,000	40,100	43,000	36,000	6,000	42,000	2
900	**26,389**	**3,700**	**40,100**	**71,089**	**64,089**	**6,000**	**70,089**	3
55,022	–	72,253	120,920	248,195[1]	249,346	–	249,346	4
126,611	–	156,827	7,525	290,964	309,150	3,825	312,975	5
9,335	–	6,569	65,212	81,116	80,000	–	80,000	6
39,465	–	3,447	76,957	119,869	119,185	16,129	135,314	7
–	–	8,000	8,500	16,500	16,500	–	16,500	8
–	–	10,000	19,240	29,240	29,240	–	29,240	9
17,069	–	–	25,283	42,351	55,986	5,651	61,637	10
–	22,366	–	–	22,366	22,366	–	22,366	11
–	47,938	8,807	6,455	63,200	165,000	15,055	180,055	12
531	–	2,826	1,316	4,673	4,957	–	4,957	13
–	–	–	24,500	24,500	30,000	–	30,000	14
248,033	**70,304**	**268,729**	**355,908**	**942,974**	**1,081,730**	**40,660**	**1,122,390**	15
–	–	10,000	30,000	40,000	40,000	–	40,000	16
–	–	21,400	219,450	240,850	85,480	153,072	238,552	17
32,592	–	50,581	69,914	153,087	153,087	3,677	156,764	18
2,287	40,000	34,838	10,095	87,220	83,966	–	83,966	19
34,879	**40,000**	**116,819**	**329,459**	**521,157**	**362,533**	**156,749**	**519,282**	20
26,221	6,000	19,801	43,686	95,708	69,435	30,000	99,435	21
957,367	93,000	511,565	918,978	2,480,911	2,338,642	239,290	2,577,932	22
228,478	41,000	28,000	178,478	475,956	523,348	–	523,348	23
14,000	–	–	25,600	39,600	19,500	–	19,500	24
17,751	1,690	–	16,592	36,033	36,033	–	36,033	25
10,881	–	665	56,554	68,100	71,227	–	71,227	26
40,593	37,200	136,197	39,654	253,644	380,682	9,543[5]	390,225	27
–	130,000	36,304	5,208	171,512	155,751	–	155,751	28
–	164,000	27,300	7,639	198,939	164,692	–	164,692	29
–	76,000	13,983	287	90,270	96,428	–	96,428	30
–	25,000	–	88,155	113,155	113,155	–	113,155	31
–	130,000	–	2,076,747	2,206,747	2,206,747	–	2,206,747	32
–	–	–	–	–	–	–	–	33
103,899	90,000	62,414	17,573	273,886	280,669	–	280,669	34
–	77,366	8,000	–	85,366	85,401	–	85,401	35
–	100,000	–	676,918	776,918	776,918	–	776,918	36
–	74	–	70,800	70,874	69,570	–	69,570	37
–	–	–	–	–	–	–	–	38
–	–	–	–	–	–	–	–	39
1,399,190	**971,330**	**844,230**	**4,222,869**	**7,437,619**	**7,388,198**	**278,833**	**7,667,031**	40
4,942	–	109,830	62,021	176,793	159,811	31,956	191,767	41
3,500	–	1,000	35,000	39,500	37,000	–	37,000	42
21,007	405,000	118,798	7,203	552,008	512,508	4,705	517,213	43
–	–	40,000	80,000	120,000	100,000	–	100,000	44
350	–	25,000	47,700	73,050	73,000	3,500	76,500	45
11,985	–	1,555	12,099	25,639	25,190	–	25,190	46
–	–	4,802	7,018	11,820	14,595	–	14,595	47
869	–	4,084	31,782	36,735	34,584	5,779	40,363	48
150,062	352,200	252,519	26,526	781,307	798,919	600,000	1,398,919	49
80,115	–	51,370	67,602	199,087	200,590	–	200,590	50
–	375,000	20,000[3]	–	375,000	375,000	–	375,000	51
–	–	–	–	–	–	–	–	52
–	–	50,000	20,000	70,000	70,000	–	70,000	53
–	–	4,000	34,000	38,000	35,000	–	35,000	54

12.—Universities and Colleges of Canada:

NOTE.—When using the bold face provincial and grand totals, the foot-

No.	University or College.	Assets.			
		Value of Endowments and Investments.	Value of Lands, Buildings, and Equipment.	Value of Other Property.	Total Assets.
		$	$	$	$
1	University of Toronto	[4]	16,174,850	[4]	16,174,850
2	Victoria University	3,141,543	2,181,107	–	5,322,650
3	Trinity	821,970	1,128,093	50,103	2,000,166
4	St. Michael's (no report)	–	–	–	–
5	Knox	326,236	921,021	–	1,247,257
6	Wycliffe	835,695	356,322	7,831	1,199,848
7	Pharmacy, 1930	141,900	55,253	29,500	226,653
8	Ontario Agricultural, 1930		No valuation compiled.		
9	Ontario Veterinary	–	275,000	10,000	285,000
10	**Totals, Ontario**	**9,883,762**	**34,386,645**	**263,105**	**44,533,512**
11	Brandon College	112,431	254,489	19,232	386,152
12	University of Manitoba	1,670,000	7,123,583	–	8,793,583
13	Manitoba Law School	–	–	–	–
14	Manitoba College	200,000	100,000	–	300,000
15	Wesley	294,682	793,793	–	1,088,475
16	St. John's	242,861	340,814	–	583,675
17	St. Boniface	3,000	500,000	–	503,000
18	**Totals, Manitoba**	**2,522,974**	**9,112,679**	**19,232**	**11,654,885**
19	University of Saskatchewan	29,818	4,226,447	–	4,256,265
20	Emmanuel	20,000	60,000	–	80,000
21	St. Andrew's	4,223	193,965	700	198,888
22	Lutheran	2,000	70,000	2,470	74,470
23	St. Chad's	25,000	160,000	–	185,000
24	Regina	1,000	821,615	–	822,615
25	Campion	18,000	200,000	14,000	232,000
26	Outlook	1,227	69,563	3,445	74,235
27	St. Peter's	–	175,000	30,000	205,000
28	College Mathieu	–	150,000	10,000	160,000
29	**Totals, Saskatchewan**	**101,268**	**6,126,590**	**60,615**	**6,288,473**
30	Canadian Junior	–	224,650	–	224,650
31	Concordia College	–	200,000	–	200,000
32	Collége des Jésuites	–	250,000	5,000	255,000
33	Juniorat St. Jean	–	215,000	–	215,000
34	University of Alberta	559,665	4,528,666	26,680	5,115,011
35	St. Stephen's	63,000	207,000	20,000	290,000
34	**Totals, Alberta**	**622,665**	**5,625,316**	**51,680**	**6,299,661**
37	Western Pharmacy	–	20,000	3,000	23,000
38	University of British Columbia	37,000	3,775,315	284,444	4,096,759
39	Victoria	–	85,000	–	85,000
40	Anglican, 1929	24,887	136,047	–	160,934
41	Union	17,000	130,000	55,000	202,000
42	**Totals, British Columbia**	**78,887**	**4,146,362**	**342,444**	**4,567,693**
43	**Totals, Canada**	**45,015,237**	**120,391,789**	**2,782,696**	**168,189,722**

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[1] Acadia's income includes $83,716 as gifts.
[2] Exclusive of figures for Mt. St. Vincent College.
[3] Reverts to Consolidated Revenue Account.
[4] Included with lands, etc.

Financial Statistics, 1930-31—concluded.

notes to the items which influence them should be taken into consideration.

Receipts.					Expenditures.			No.
From Invest-ments.	From Govern-ments and Muni-cipalities.	From Fees.[6]	From Other Sources.[7]	Total Income.	Current.	Capital.	Total.	
$	$	$	$	$	$	$	$	
134,075	517,000	678,425	121,943	1,451,443	2,797,185	973,597	3,770,782	1
157,336	–	62,149	35,234	254,719	284,959	616,734	901,693	2
42,815	–	24,424	127,746	194,985	194,699	–	194,699	3
–	–	–	–	–	–	–	–	4
16,055	–	–	25,533	41,588	31,934	8,634	40,568	5
63,610	–	763	122,303	186,676	72,432	136,135	208,567	6
5,664	–	53,134	24,822	83,620	52,324	–	52,324	7
–	625,410	24,364	189,710	839,484	839,484	–	839,484	8
–	51,850	7,783	2,441	62,074	51,850	–	51,850	9
692,385	**2,326,460**	**1,514,000**	**1,080,683**	**5,613,528**	**6,761,064**	**2,381,040**	**9,142,104**	10
5,765	–	21,543	34,136	61,444	83,738	–	83,738	11
92,500	501,000	237,200	148,181	978,881	986,598	550,000	1,536,598	12
–	–	8,631	5,439	14,070	14,198	–	14,198	13
5,177	–	232	26,878	32,287	42,606	–	42,606	14
18,842	–	26,305	59,210	104,357	105,377	5,606	110,983	15
9,495	–	18,120	52,348	79,963	89,879	–	89,879	16
3,000	–	–	53,570	56,570	46,625	9,950	56,575	17
134,779	**501,000**	**312,031**	**379,762**	**1,327,572**	**1,369,021**	**565,556**	**1,934,577**	18
1,542	779,739	91,049	22,819	895,149	797,573	108,928	906,501	19
800	–	–	21,200	22,000	22,000	–	22,000	20
205	–	191	52,345	52,741	48,730	4,000	52,730	21
–	–	350	17,855	18,205	17,632	1,223	18,855	22
998	–	1,210	6,918	9,126	9,076	–	9,076	23
55	1,200	54,215	81,061	136,531	132,216	975	133,191	24
2,100	–	4,520	28,460	35,080	31,500	6,400	37,900	25
–	–	10,000	12,000	22,000	22,000	–	22,000	26
–	–	150	11,350	11,500	11,500	–	11,500	27
–	–	7,833	15,867	23,700	23,260	1,108	24,368	28
5,700	**780,939**	**169,518**	**269,875**	**1,226,032**	**1,115,487**	**122,634**	**1,238,121**	29
–	–	13,388	80,531	93,919	89,158	79,114	168,272	30
–	–	18,000	5,300	23,300	23,300	–	23,300	31
–	–	–	33,000	33,000	39,800	–	39,800	32
–	–	–	14,600	14,600	14,325	–	14,325	33
25,000	576,388	147,038	48,142	796,568	796,479	215,269	1,011,748	34
5,650	–	–	43,600	49,250	42,700	4,500	47,200	35
30,650	**576,388**	**178,426**	**225,173**	**1,010,637**	**1,005,762**	**298,883**	**1,304,645**	36
–	–	3,110	–	3,110	3,110	–	3,110	37
33,236	588,776	221,893	112,307	956,212	841,242	81,930	923,172	38
–	14,208	23,479	–	37,687	37,687	–	37,687	39
1,112	–	–	14,361	15,473	15,013	–	15,013	40
559	–	–	31,376	31,935	34,068	–	34,068	41
34,907	**602,984**	**248,482**	**158,044**	**1,044,417**	**931,120**	**81,930**	**1,013,050**	42
2,581,423	**5,895,794**	**3,655,935**	**7,061,873**	**19,195,025**	**20,079,004**	**3,932,285**	**24,011,289**	43

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[5] Does not include expenditure made on new buildings. For the University of Montreal this had amounted to $2,202,152 at June 1931.

[6] Other than board and lodging.

[7] Including board and lodging.

Section 2.—Scientific and Industrial Research in Canada.

This section has, in past years, dealt with the history of scientific and industrial research in Canada and has included subsections outlining the organization and work of the National Research Council and of those provincial councils and private institutions which are primarily interested in research work. During the past year, the operations of these organizations continued to be conducted along the lines described in previous issues of the Year Book, and to conserve space the section is not reprinted in this edition. The reader is referred in this connection to pages 866 to 872 of the 1932 Year Book.

An important event in the history of scientific research in Canada was the opening of the new building of the National Research Council on Aug. 10, 1932.

Section 3.—The Libraries of Canada.[1]

It is more than three and a quarter centuries since the first known library came to what is now the Dominion of Canada—the library brought by Marc Lescarbot to Port Royal in 1606. A library was connected with Laval College at its establishment in 1663, although it was many years later before this institution became important. During the next century record is found of several libraries in Quebec city; one of these, a Jesuit library mentioned by Peter Kalm, the Swedish traveller (its existence is recorded again in 1789) was afterwards sold to the *Quebec Gazette* and again sold in 1851 to the Library of Parliament. The volumes, which have survived the ravages of time and two fires, may still be found on Parliament Hill at Ottawa. Two other libraries founded in Quebec in the 18th century were a subscription library established in 1779 and the Quebec Legislative Library established in 1792. Four years later a public library was opened in Montreal. The Legislative Library of Upper Canada was established in 1791. The Legislative Library of Prince Edward Island is somewhat older, as it was founded in 1773. The King's College Library, located until recently at Windsor, Nova Scotia, and now at Halifax, dates from 1800, the year of the founding of the oldest existing public library in the Dominion, the library at Niagara. During the first quarter of the 19th century there were several libraries founded in Nova Scotia, several in Montreal, and at least one in Western Canada.

The first quarter of the 20th century was most active in the establishment of libraries for public use. Of the 1,110 existing Canadian libraries for which statistics have been secured, 256 are known to have been established during that period, without regard to the fact that the dates of founding have not been secured for all libraries and the certainty that for one reason or another some libraries did not survive.

Public Libraries.—The public libraries included in the "Survey of Libraries in Canada" numbered 622 in 1931, more than three-quarters of the total being in Ontario which has a library system under the control of the Provincial Department of Education. The public libraries of Canada in 1931 contained 4,499,712 volumes, having a circulation of 20,904,924 volumes in addition to those lent to reading-room borrowers. In the same year $509,302 was spent for books and periodicals. The following table gives summary statistics of these libraries.

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[1] The Bureau of Statistics has recently issued a Survey of Libraries in Canada, which may be obtained on application to the Dominion Statistician.

13.—Summary Statistics of Public Libraries, 1931.

Province	Number of Libraries.	Volumes.	Circulation.	Libraries Receiving Periodicals.	Number of Periodicals Received.	Expenditure on Books and Periodicals in 1931.
						$
Prince Edward Island	2	9,200	44,023	2	40	424
Nova Scotia	14	97,424	141,334	7	169	2,921
New Brunswick	9	84,873	225,311	7	251	5,285
Quebec	21	535,097	625,472	14	1,313	21,071
Ontario	473	3,054,943	13,853,149	258	8,048	340,322
Manitoba	20	101,602	876,996	6	276	25,848
Saskatchewan	27	188,550	1,521,937	14	599	35,162
Alberta	20	190,511	1,535,129	12	495	27,364
British Columbia	33	225,162	2,068,773	12	1,014	49,369
Yukon	3	12,350	12,800	2	34	1,556
Canada	**622**	**4,499,712**	**20,904,924**	**334**	**12,239**	**509,322**

University, College and Professional School Libraries.—In 1931 this group included 230 libraries in advanced educational institutions having a full-time enrolment of 63,300 students and a teaching staff of about 6,700. The total contents of these libraries were 3,615,402 volumes and the total expenditure for books and periodicals was $246,617. The largest of these libraries were those of McGill University with 450,000 volumes and the University of Toronto with 275,000 volumes.

Business, Technical Society and Government Libraries.—These included about 2,300,000 volumes, of which over 1,800,000 were in 52 governmental libraries, Dominion and Provincial. The largest of these libraries were the Parliamentary Library in Ottawa with 400,000 volumes, the Legislative Library of Ontario with 250,000 volumes and the Provincial Library of British Columbia with 205,000 volumes.

School Libraries.—Nearly 300 public high schools and about 375 private or independent high schools reported the existence of libraries in their schools. These included the bulk of the secondary schools of the Dominion. Elementary schools also in many cases possess libraries. In Ontario, 5,927 out of 5,986 rural schools were in possession of a public library, the libraries of 5,612 of these schools averaged 251 books each, making a total of over 1,400,000 volumes. Rural school libraries are on the increase thoughout the Dominion.

Library Schools.—Schools for the training of librarians exist at McGill University and at the University of Toronto. The former gives a short six weeks course of training as well as a degree course giving the degree of Bachelor of Library Science after a one-year course to those who have already a bachelor degree. The latter offers a one-year course in library training, the minimum requirement for admission to the course being honour matriculation. Acadia University gives two elective courses in library science which may be taken for its degree of Bachelor of Arts.

Section 4.—Art in Canada.

An article entitled "The Development of the Fine Arts in Canada", contributed by Newton MacTavish, M.A., D. Litt., appeared at pp. 995-1009 of the 1931 Year Book and a shorter article, dealing more particularly with the National Art Gallery, at pp. 886-888 of the 1924 Year Book.

CHAPTER XXVI.—PUBLIC HEALTH AND BENEVOLENCE.

The rapid increase in the numbers committed to our various institutions, such as mental hospitals for the insane, feeble-minded and epileptic; the alleged increase in juvenile crime and the extension of social work in this field; the increasing number of institutions for the care of the aged and incurable, as well as for the care of dependent, neglected and handicapped children, have been a marked feature of the twentieth century. In this new and important field statistical data are collected and results analyzed and published in leading countries. Although the difficulties encountered in building up statistics on a uniform basis in Canada have been many, these statistics are now being collected on a Dominion-wide basis either at the decennial census or on an annual basis.

In any comprehensive study of the situation it is essential that, besides health and hospitalization records, social statistics should also receive attention. Statistics regarding the number of children placed in foster homes, free family homes, number of children adopted, number of children cared for in day nurseries, the institutional care of juvenile delinquents, the numbers of dependent, neglected and handicapped children receiving institutional care, fuller and more accurate data concerning inmates in our mental institutions, institutions for the feeble-minded, county asylums, county almshouses, poorhouses, etc., are becoming absolutely necessary to the proper drafting of social legislation and in order to deal with the problems of civilization, growing more complex day by day.

As public and private charity work together for the amelioration of conditions among the dependent and neglected, the proper treatment of defectives and the reclamation of the delinquent, the problem is made more difficult of statistical measurement, although the tendency to-day in most parts of Canada is to remove the responsibility of social work from the shoulders of individuals and private agencies and to regard it as more in the nature of a public responsibility. The growth in recent years of the most cordial relationships between governmental bodies and social welfare workers in the fields of school care and child welfare movements is manifested in the number of Child Welfare Acts in force in the various provinces of Canada.

Section 1.—Administration.

In Canada, speaking generally, the administration of public health activities and the establishment and maintenance of institutions is in the hands of the various Provincial Governments, under the powers given them in Sec. 92 of the British North America Act, 1867. Under their control municipalities, societies and individuals generally initiate charitable and humane efforts, depending on the Government to some extent for financial aid and for competent uniform inspection of methods and standards. Apart, however, from the actual organization of Provincial Health Departments and of the administrative bodies charged with the management of hospitals and other such institutions, particular attention is given to the same branches of public health work in all the provinces. Important, and reflecting most clearly the benefits accruing from such work, are the provisions for medical inspection of school children. These are carried out in some cases by the district or sub-district medical health officers, and in others by public health nurses whose activities are confined to this work alone. In addition to the continual supervision exercised over the health of the children, expert advice and assistance are supplied freely to children, teachers and parents. In many cases dental inspection is provided for. While this work has been carried on upon a considerable scale for only a few years, great benefits have already resulted from it, notably general improvement in health and sanitary conditions and in the control and prevention of epidemics.

Exercising particular jurisdiction over some phases of the general health of the people of the Dominion is the Department of Health of the Dominion Government, while the Dominion Council of Health acts as a clearing house on many important questions related to the health of the people. This Council consists of the Deputy Minister of the Dominion Department of Pensions and National Health as chairman, the chief executive officer of the provincial department or board of health of each province, together with such other persons, not exceeding five, as may be appointed by the Governor in Council to hold office for three years. Of these appointed members, four have in the past represented agriculture, labour, rural women's work and social service, and child welfare, while the fifth member is a scientific adviser on public health matters. (A fuller description of this Council will be found at pp. 908-909 of the 1926 Year Book.)

The public health activities of the Dominion Government were described at pp. 876-879 of the 1932 Year Book, and those of the various Provincial Governments at pp. 879-883 of the same volume. For a brief description of the organization and activities of the Red Cross Society and of the Victorian Order of Nurses, readers may refer to p. 923 of the Year Book for 1922-23. Finally, a statement regarding Mothers' Allowances showing the scales of payments and the methods of administration was published at pp. 935-936 of the 1925 Year Book.

Section 2.—Institutional Statistics.[1]

The most familiar of all the public institutions established to administer and foster the general health of the community is the general hospital common to all cities and towns of any considerable population, and found also in the more prosperous rural districts. Such hospitals are generally erected and supported by the municipality, their actual administration being in the hands of a board of trustees; their revenue, in addition to that provided by the municipality, is derived in the main from grants from the Provincial Governments, from donations of individuals and societies, and from patients' fees. Admission and treatment are free to all deserving persons who apply for them and whose resources are so limited as to prevent their otherwise receiving proper medical attention, while it is more or less generally expected of others that payments for services shall be made in proportion to costs and the ability of patients to defray them. Second in importance are the houses of refuge and orphanages—homes where destitute adults and homeless children are taken in, fed and clothed until they can support themselves or until homes are found for them elsewhere. Orphans' homes are found in practically every urban and rural community of any size, while refuges or homes for the aged are supported by the larger centres and by county municipalities. Asylums for the insane, also found in all the provinces, differ from the foregoing types in that they are in general owned, supported and administered entirely by the provinces. In Nova Scotia, however, the insane of each county, together with the inmates of the refuges and orphanages, are in most instances cared for in one institution. Other institutions supported by the public include: isolation hospitals, maternity hospitals, homes for the deaf, dumb and blind, homes for incurables, infirmaries, homes for epileptics and lazarettos for lepers, and tuberculosis sanatoria.

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[1] This section has been revised by J. C. Brady, in Charge of Census of Institutions, Dominion Bureau of Statistics.

Throughout the Dominion many other more or less similar institutions exist whose nature is more independent than that of the types mentioned above. These institutions do not receive Provincial Government grants and are not in all cases subject to inspection.

By authority granted by the Dominion Government in 1930, the Dominion Bureau of Statistics, through its newly created branch of Census of Institutions, now collects annual statistics for all hospitals in Canada, including Mental Institutions and Homes for Incurables.

Subsection 1.—Hospitals, other than Mental.

The great majority of hospitals are public hospitals which are either under municipal control or under private boards of management. These hospitals are assisted in their care of indigent patients by municipal and provincial grants. In addition there are: private hospitals which do not receive public grants; hospitals conducted by various religious orders; convalescent hospitals; hospitals for incurables; tuberculosis sanatoria; Red Cross hospitals and out-posts; special hospitals; lazarettos for the segregation and treatment of persons afflicted with leprosy; and hospitals for the treatment of mental and nervous diseases which are, generally speaking, maintained by the provinces. The care of persons suffering from communicable diseases is the responsibility of the various municipalities.

There are also a limited number of hospitals under Dominion Government administration, *e. g.*, those in connection with ex-service men, military forces, marine, quarantine and immigration.

The modern hospital is at once a battlefield between life and death, an institution for the practice of medicine and surgery and, viewed broadly, a financial enterprise which exceeds in magnitude many nation-wide industries. There has been a remarkable growth of public interest in the work of our hospitals in recent years and hospital statistics have become a necessity to the study of certain branches of present-day social economics.

The total number of hospitals, other than mental hospitals and homes for incurables, in operation in Canada during 1931 was 801, of which 454 were general public, 157 general private, 43 Red Cross, 36 Dominion, 31 tuberculosis, 14 Salvation Army, 19 isolation and 47 other (special).[1]

Summary statistics of the hospitals of the Dominion other than mental hospitals and homes for incurables, are presented for 1931 in Table **1**, while the bed capacity of the hospitals in each province is given in Table **2**, and detailed statistics of staff and patients, receipts and expenditures are shown by provinces in Table **3**.

1.—Summary Statistics of Hospitals in Canada, not including Mental Hospitals and Hospitals and Homes for Incurables, 1931.

Item.	General Public.	All Other.	Total.
	No.	No.	No.
Numbers of hospitals	454	347	801
Bed capacities	35,651	16,378	52,029
Patients admitted	505,655	86,747	592,402
Collective stays of patients in days, (exclusive of infants born in hospitals)	7,527,251	3,882,053	11,409,304
Deaths in hospitals	23,941	3,624	27,565

The total hospital receipts for 1931, of the hospitals included in the above table were $41,164,135, of which $33,616,574 was classified as maintenance receipts, including Government and municipal grants amounting to $14,204,810, patients' fees amounting to $16,096,583 and receipts from other sources, $3,315,181.

Expenditures for these hospitals, including those for maintenance and improvement, amounted to $44,691,305 in 1931, of which $34,198,010 was classified as expenditures for maintenance. These figures included salaries and wages $13,995,432, provisions $7,655,764, fuel, power, light and water $3,023,994, and other expenditures for maintenance $9,522,820.

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[1] A complete list of all hospitals in Canada giving name, location, type, bed accommodation, etc. will be found in the new Hospital Directory for Canada, 1932, issued by the Dominion Bureau of Statistics.

2.—Bed Capacities of Hospitals, by Provinces, not including Mental Hospitals and Hospitals and Homes for Incurables, 1931.

Province.	General Public.	All Other.	Total.
	No.	No.	No.
Prince Edward Island	180	50	230
Nova Scotia	1,335	1,066	2,401
New Brunswick	1,302	600	1,902
Quebec	8,411	4,625	13,036
Ontario	11,445	5,821	17,266
Manitoba	2,262	1,106	3,368
Saskatchewan	2,911	1,088	3,999
Alberta	3,476	973	4,449
British Columbia	4,230	1,049	5,279
Northwest Territories and Yukon	99	–	99
Totals	**35,651**	**16,378**	**52,029**

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931.

Province and Item.		General Public.
		No.
Northwest Territories and Yukon.		
Hospitals by type		9
Training schools		–
Staff—		
Salaried physicians		3
Internes		–
Attending doctors		[3]
Graduate nurses		15
Nurses in training		–
Total, Personnel		[3]
Hospitals with—		
X-Ray Department		2
Clinical Laboratory		2
Physical Therapy Department		–
Movement of Population— (as at June 1st, 1931)		
Admitted during year		489
Live births		29
Total Under Treatment (excl. infants born in hospital)		489
Discharges— (incl. infants born in hospital)		486
Deaths		32
Collective stay (hospital days) (excl. infants born in hospital)		15,089
Receipts—		
Government and municipal grants	$	29,293
Patients' fees	$	23,462
Other sources	$	12,292
Total, Receipts	$	**65,047**
Disbursements—		
Salaries, etc	$	20,938
Provisions	$	15,865
Fuel, light, power and water	$	8,271
All other	$	6,586
Total, Expenditures	$	**51,660**
Prince Edward Island.		
Hospitals by type[1]		3
Training schools		3
Staff—		
Salaried physicians		1
Internes		1
Attending doctors		38
Graduate nurses		144
Nurses in training		62
Total, Personnel		117
Hospitals with—		
X-Ray Department		3
Clinical Laboratory		3
Physical Therapy Department		3
Movement of Population (during 1931)—		
Admitted during year		3,067
Live births		322
Total, Under Treatment (excl. infants born in hospital)		3,153
Discharges (incl. infants born in hospital)		3,382
Deaths		115
Collective stay (hospital days) (excl. infants born in hospital)		36,773
Days' treatment to indigent patients[2]	(2)	2,945
Receipts (Maintenance)—		
Government and municipal grants	$	8,000
Patients' fees	$	73,348
Other sources	$	15,351
Total, Maintenance Receipts	$	**96,699**
Disbursements (Maintenance)—		
Salaries, etc	$	33,421
Provisions	$	27,569
Fuel, light, power and water	$	13,439
All other	$	26,215
Total, Maintenance Expenditures	$	**100,644**
Gross Receipts	$	103,531
Gross Expenditures	$	104,678

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[1] Also one tuberculosis hospital, opened in May 1931 and not reporting for that year. [2] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [3] No report.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.[5]	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
Nova Scotia.								
Hospitals by type	22	2	–	2	3[1]	1[5]	6[2]	1
Training schools	13	2	–	2	–	–	–	1
Staff—								
Salaried physicians	3	–	–	–	5	–	20	–
Internes	16	3	–	2	8	–	–	3
Attending doctors	318	34	–	25	1	–	–	13
Graduate nurses	115	17	–	13	13	–	16	7
Nurses in training	274	40	–	24	–	–	–	13
Totals, Personnel	**824**	**84**	–	**62**	**168**	–	**176**	**36**
Hospitals with—								
X-Ray Department	20	2	–	–	1	–	1	1
Clinical Laboratory	15	1	–	–	1	–	2	1
Physical Therapy Department	4	–	–	–	–	–	1	1
Movement of Population (During 1931)—								
Admitted during year	19,716	1,282	–	1,008	170	–	2,599	899
Live births	1,248	353	–	756	–	–	–	–
Totals, Under Treatment (excl. infants born in hospital)	**20,296**	**1,290**	–	**1,060**	**468**	–	**2,765**	**899**
Discharges (incl. infants born in hospital)	20,345	1,475	–	1,740	165	–	2,632	834
Deaths	714	57	–	33	25	–	–	57
Collective stay (hospital days) excl. infants born in hospital)	276,327	14,741	–	13,508	81,473	–	59,076	16,906
Days' treatment to indigent patients[3]	(9) 4,933	(1) 211	–	(1)2,487	–	–	–	–
Receipts (Maintenance)—:								
Government and municipal grants $	186,352	–	–	2,500	204,840	–	–	14,546
Patients' fees $	446,707	57,081	–	32,501	54,034	–	–	8,855
Other sources $	187,825	6,283	–	3,722	9,319	–	1,030[4]	7,701
Totals, Maintenance Receipts $	**820,884**	**63,364**	–	**38,723**	**263,193**	–	**1,030**	**31,102**
Disbursements (Maintenance)—								
Salaries, etc. $	325,554	15,789	–	17,384	109,163	–	144,961	13,087
Provisions $	224,530	24,481	–	11,017	107,338	–	33,778	8,512
Fuel, light, power and water $	91,602	7,547	–	8,812	35,480	–	18,195	2,737
All other $	291,047	28,395	–	17,707	40,895	–	16,424	8,238
Totals, Maintenance Expenditures $	**932,733**	**76,212**	–	**54,920**	**292,876**	–	**213,358**	**32,574**
Gross Receipts $	966,555	88,132	–	40,450	275,455	–	1,030	37,330
Gross Expenditures $	1,027,132	79,439	–	54,919	402,704	–	213,358	32,574

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[1] City Tuberculosis, Halifax, did not report. [2] Dominion hospitals include—pensions 1, military 1, quarantine and immigration 2 (1 had no cases), marine 2 (no cases). [3] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [4] Receipts only for two quarantine and immigration hospitals. Expenses for Dominion hospitals borne by Departments of Dominion Government. [5] No report.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
New Brunswick.								
Hospitals by type	16	4	1[2]	1	2[3]	–	4[4]	–
Training schools	13	–	–	1	1	–	–	–
Staff—								
Salaried physicians	7	–	–	–	7	–	9	–
Internes	7	–	–	–	–	–	–	–
Attending doctors	215	18	–	32	13	–	–	–
Graduate nurses	95	9	–	5	33	–	9	–
Nurses in training	363	–	–	11	13	–	–	–
Totals, Personnel	**763**	**19**	–	**20**	**162**	–	**39**	–
Hospitals with—								
X-Ray Department	15	1	–	–	2	–	1	–
Clinical Laboratory	14	–	–	–	2	–	2	–
Physical Therapy Department	10	–	–	–	2	–	1	–
Movement of Population (during 1931)—								
Admitted during year	14,899[1]	591	–	275	339	–	827	–
Live births	976	15	–	267	–	–	–	–
Totals, Under Treatment (excl. infants born in hospital)	**15,591**	**595**	–	**275**	**669**	–	**907**	–
Discharges (incl. infants born in hospital)	15,201	574	–	557	348	–	833	–
Deaths	644	21	–	10	53	–	–	–
Collective stay (hospital days) (excl. infants born in hospital)	196,310	5,567	–	3,243	117,430	–	3,535	–
Days' treatment to indigent patients[5]	(9) 11,161	(1) 156	–	(1) 231	(1) 1,853	–	–	–
Receipts (Maintenance)–								
Government and municipal grants... $	210,897	–	–	1,713	310,916	–	–	–
Patients' fees... $	481,045	–	–	10,535	30,636	–	–	–
Other sources... $	58,604	–	–	3,112	18,440	–	–	–
Totals, Maintenance Receipts $	**750,546**	[6]	–	**15,360**	**359,992**	–	–	–
Disbursements (Maintenance)—								
Salaries, etc... $	246,813	[6]	–	4,816	119,286	–	52,752	–
Provisions... $	165,298	[6]	–	3,315	92,412	–	13,470	–
Fuel, light, power and water... $	95,948	[6]	–	2,528	19,826	–	3,546	–
All other... $	217,966	[6]	–	2,437	53,531	–	8,427	–
Totals, Maintenance Expenditures $	**726,025**	[6]	–	**13,096**	**285,055**	–	**78,195**	–
Gross Receipts... $	816,921	[6]	–	15,496	359,992	–	–	–
Gross Expenditures... $	2,080,446	[6]	–	14,018	359,779	–	78,195	–

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[1] Movement of population for 2 hospitals not included. [2] Destroyed by fire, November 1, 1931. No report. [3] Fire destroyed 3 pavilions for patients Dec. 8, 1931. [4] Dominion hospitals include: 1 pension, 2 quarantine and immigration (1 had no cases), and 1 leper hospital. [5] Figures in parentheses opposite days' treatment to indigent patients indicate the number of hospitals reporting under this item. [6] Financial figures not available.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
Quebec.								
Hospitals by type	54[1]	18	–	1	7	3[2]	5[3]	16[4]
Training schools	34	2	–	1	–	2	–	5
Staff—								
Salaried physicians	140	14	–	–	18	7	15	20
Internes	190	1	–	–	8	16	–	10
Attending doctors	1,416	64	–	8	16	14	10	169
Graduate nurses	656	32	–	8	39	42	36	69
Nurses in training	1,688	29	–	12	–	42	–	119
Totals, Personnel	**7,095**	**148**	–	**33**	**428**	**206**	**250**	**389**
Hospitals with—								
X-Ray Department	48	6	–	–	6	1	–	6
Clinical Laboratory	37	4	–	–	6	1	–	10
Physical Therapy Department	31	3	–	–	4	–	–	6
Movement of Population (during 1931)—								
Admitted during year	94,169	2,783	–	705	1,464	1,555	973	7,347
Live births	7,797	593	–	623	–	–	1	35
Totals, Under Treatment (excl. infants born in hospital)	**96,684**	**2,833**	–	**726**	**2,384**	**1,555**	**1,405**	**7,418**
Discharges (incl. infants born in hospital)	95,709	2,610	–	1,337	1,182	1,473	982	6,282
Deaths	4,914	78	–	13	211	87	27	254
Collective stay (hospital days) (excl. infants born in hospital)	1,927,561	43,461	–	16,727	349,868	44,189	164,693	246,652
Days' treatment to indigent patients[5]	(39) 192,220	(3) 2,575	–	–	(3) 4,935	(1) 50	–	(5) 28,204
Receipts (Maintenance)—								
Government and municipal grants $	2,145,410	500	–	1,467	523,173	136,902	–	194,569
Patients' fees $	2,460,933	123,017[6]	–	38,294	156,186	3,389	–	106,687
Other sources $	1,170,612	84,191	–	2,332	75,117	3,867	–	87,122
Totals, Maintenance Receipts $	**5,776,955**	**207,708**[6]	–	**42,093**	**754,476**	**144,158**	–	**388,378**
Disbursements (Maintenance)—								
Salaries, etc. $	1,422,802	–	–	16,028	235,081	30,802	286,801	229,851
Provisions $	1,720,594	–	–	9,634	191,412	25,842	83,541	83,925
Fuel, light, power and water $	367,537	–	–	4,802	105,296	12,011	51,346	39,000
All other $	1,982,737	–	–	13,748	209,668	40,542	67,926	157,866
Totals, Maintenance Expenditures $	**5,493,670**	–	–	**44,212**	**741,457**	**199,197**	**489,614**	**510,642**
Gross Receipts $	9,041,298	207,708	–	44,212	854,711	144,158	–	798,638
Gross Expenditures $	9,204,003	216,529	–	44,212	877,646	109,107	491,390	795,288

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[1] Three hospitals did not report. [2] Movement of population and financial report of one hospital not available. [3] Dominion hospitals include 1 pension, 2 military, 2 quarantine and immigration (1 had no cases). [4] Includes: 2 industrial, 2 nervous diseases (1 did not report expenses) 1 cancer, 1 eye, ear, nose and throat (no financial report), 5 convalescent, 1 orthopædic, 4 pædiatric (1 did not report on finances). [5] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [6] Three hospitals did not report patients' fees.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.		General Public.		General Private and Private Maternity.	Red Cross.		Salvation Army.		Tuberculosis.	Isolation.	Dominion.	Other.
		No.		No.	No.		No.		No.	No.	No.	No.
New Brunswick.												
Hospitals by type		16		4	1[2]		1		2[3]	–	4[4]	–
Training schools		13		–	–		1		1	–	–	–
Staff—												
Salaried physicians		7		–	–		–		7	–	9	–
Internes		7		–	–		–		–	–	–	–
Attending doctors		215		18	–		32		13	–	–	–
Graduate nurses		95		9	–		5		33	–	9	–
Nurses in training		363		–	–		11		13	–	–	–
Totals, Personnel		**763**		**19**	–		**20**		**162**	–	**39**	–
Hospitals with—												
X-Ray Department		15		1	–		–		2	–	1	–
Clinical Laboratory		14		–	–		–		2	–	2	–
Physical Therapy Department		10		–	–		–		2	–	1	–
Movement of Population (during 1931)—												
Admitted during year		14,899[1]		591	–		275		339	–	827	–
Live births		976		15	–		267		–	–	–	–
Totals, Under Treatment (excl. infants born in hospital)		**15,591**		**595**	–		**275**		**669**	–	**907**	–
Discharges (incl. infants born in hospital)		15,201		574	–		557		348	–	833	–
Deaths		644		21	–		10		53	–	–	–
Collective stay (hospital days) (excl. infants born in hospital)		196,310		5,567	–		3,243		117,430	–	3,535	–
Days' treatment to indigent patients[5]	(9)	11,161	(1)	156	–	(1)	231	(1)	1,853	–	–	–
Receipts (Maintenance)—												
Government and municipal grants $		210,897		–	–		1,713		310,916	–	–	–
Patients' fees $		481,045		–	–		10,535		30,636	–	–	–
Other sources $		58,604		–	–		3,112		18,440	–	–	–
Totals, Maintenance Receipts $		**750,546**		[6]	–		**15,360**		**359,992**	–	–	–
Disbursements (Maintenance)—												
Salaries, etc. $		246,813		[6]	–		4,816		119,286	–	52,752	–
Provisions $		165,298		[6]	–		3,315		92,412	–	13,470	–
Fuel, light, power and water $		95,948		[6]	–		2,528		19,826	–	3,546	–
All other $		217,966		[6]	–		2,437		53,531	–	8,427	–
Totals, Maintenance Expenditures $		**726,025**		[6]	–		**13,096**		**285,055**	–	**78,195**	–
Gross Receipts $		816,921		[6]	–		15,496		359,992	–	–	–
Gross Expenditures $		2,080,446		[6]	–		14,018		359,779	–	78,195	–

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[1] Movement of population for 2 hospitals not included. [2] Destroyed by fire, November 1, 1931. No report. [3] Fire destroyed 3 pavilions for patients Dec. 8, 1931. [4] Dominion hospitals include: 1 pension, 2 quarantine and immigration (1 had no cases), and 1 leper hospital. [5] Figures in parentheses opposite days' treatment to indigent patients indicate the number of hospitals reporting under this item. [6] Financial figures not available.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
Quebec.								
Hospitals by type	54[1]	18	–	1	7	3[2]	5[3]	16[4]
Training schools	34	2	–	1	–	2	–	5
Staff—								
Salaried physicians	140	14	–	–	18	7	15	20
Internes	190	1	–	–	8	16	–	10
Attending doctors	1,416	64	–	8	16	14	10	169
Graduate nurses	656	32	–	8	39	42	36	69
Nurses in training	1,688	29	–	12	–	42	–	119
Totals, Personnel	**7,095**	**148**	–	**33**	**428**	**206**	**250**	**389**
Hospitals with—								
X-Ray Department	48	6	–	–	6	1	–	6
Clinical Laboratory	37	4	–	–	6	1	–	10
Physical Therapy Department	31	3	–	–	4	–	–	6
Movement of Population (during 1931)—								
Admitted during year	94,169	2,783	–	705	1,464	1,555	973	7,347
Live births	7,797	593	–	623	–	–	1	35
Totals, Under Treatment (excl. infants born in hospital)	**96,684**	**2,833**	–	**726**	**2,384**	**1,555**	**1,405**	**7,418**
Discharges (incl. infants born in hospital)	95,709	2,610	–	1,337	1,182	1,473	982	6,282
Deaths	4,914	78	–	13	211	87	27	254
Collective stay (hospital days) (excl. infants born in hospital)	1,927,561	43,461	–	16,727	349,868	44,189	164,693	246,652
Days' treatment to indigent patients[5]	(39) 192,220	(3) 2,575	–	–	(3) 4,935	(1) 50	–	(5) 28,204
Receipts (Maintenance)—								
Government and municipal grants $	2,145,410	500	–	1,467	523,173	136,902	–	194,569
Patients' fees $	2,460,933	123,017[6]	–	38,294	156,186	3,389	–	106,687
Other sources $	1,170,612	84,191	–	2,332	75,117	3,867	–	87,122
Totals, Maintenance Receipts $	**5,776,955**	**207,708**[6]	–	**42,093**	**754,476**	**144,158**	–	**388,378**
Disbursements (Maintenance)—								
Salaries, etc. $	1,422,802	–	–	16,028	235,081	30,802	286,801	229,851
Provisions $	1,720,594	–	–	9,634	191,412	25,842	83,541	83,925
Fuel, light, power and water $	367,537	–	–	4,802	105,296	12,011	51,346	39,000
All other $	1,982,737	–	–	13,748	209,668	40,542	67,926	157,866
Totals, Maintenance Expenditures $	**5,493,670**	–	–	**44,212**	**741,457**	**109,197**	**489,614**	**519,642**
Gross Receipts $	9,041,298	207,708	–	44,212	854,711	144,158	–	798,638
Gross Expenditures $	9,204,003	216,529	–	44,212	877,646	109,107	491,390	795,288

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[1] Three hospitals did not report. [2] Movement of population and financial report of one hospital not available. [3] Dominion hospitals include 1 pension, 2 military, 2 quarantine and immigration (1 had no cases). [4] Includes: 2 industrial, 2 nervous diseases (1 did not report expenses) 1 cancer, 1 eye, ear, nose and throat (no financial report), 5 convalescent, 1 orthopædic, 4 pædiatric (1 did not report on finances). [5] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [6] Three hospitals did not report patients' fees.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
Ontario.								
Hospitals by type	115	37	23	5	12	7[1]	8[2]	13[3]
Training schools	84	4	–	3	1	2	–	2
Staff—								
Salaried physicians	84	7	–	–	39	5	47	11
Internes	214	–	–	1	11	5	3	16
Attending doctors	3,168	418	–	182	47	13	40	224
Graduate nurses	987	93	41	37	75	35	82	59
Nurses in training	3,499	31	–	104	47	149	–	147
Totals, Personnel	**8,685**	**284**	**41**	**236**	**1,135**	**196**	**406**	**658**
Hospitals with—								
X-Ray Department	99	6	3	1	10	1	3	6
Clinical Laboratory	68	4	–	3	10	2	4	5
Physical Therapy Department	46	4	–	–	6	–	2	2
Movement of Population (during 1931)—								
Admitted during year	175,554	4,867	3,062	4,460	2,418	1,746	4,776	8,893
Live births	22,311	1,122	562	1,958	2	–	70	5
Totals, Under Treatment (excl. infants born in hospital)	**164,915**	**4,892**	**3,136**	**4,460**	**4,643**	**2,811**	**5,711**	**8,981**
Discharges (incl. infants born in hospital)	188,392	5,438	3,469	6,460	2,071	2,786	4,862	7,868
Deaths	9,142	104	130	172	429	83	111	703
Collective stay (hospital days) (excl. infants born in hospital)	2,259,739	42,966	29,323	54,139	840,081	73,634	330,684	169,767
Days' treatment to indigent patients[4]	(63) 51,970	(6) 780	–	(5)2,536	(9) 33,805	(2)32,644	–	(1) 329
Receipts (Maintenance)—								
Government and municipal grants $	2,749,007	–	38,260	32,383	1,650,760	259,155[7]	–	269,389[8]
Patients' fees $	6,331,157	150,489[5]	86,252	176,838	263,504	28,380	–	142,759
Other sources $	394,107	21,870	40,530	14,934	32,988	–	–	41,007
Totals, Maintenance Receipts $	**9,474,271**	**172,359**	**165,042**	**224,155**	**1,947,252**	**287,535**	–	**453,155**
Disbursements (Maintenance)—								
Salaries, etc. $	3,134,154	–	[6]	88.930	740,711	148,247	589,177	307,976
Provisions $	1,548,236	–	22,705	53,325	475,067	46,138	151,327	116,205
Fuel, light, power and water $	638,700	–	–	23,326	169,592	21,159	62,793	51,371
All other $	2,193,682	–	122,627	51,367	496,215	23,717	123,487	178,506
Totals, Maintenance Expenditures $	**7,514,772**	–	**145,332**	**216,948**	**1,881,585**	**239,261**	**926,784**	**654,058**
Gross Receipts $	10,616,255	179,083	173,208	234,106	2,267,091	287,535	–	575,879
Gross Expenditures $	8,830,713	196,343	145,332	229,197	1,976,884	244,580	929,214	660,034

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[1] Dundas Isolation and Hopewell Smallpox, Ottawa, no cases. [2] Dominion hospitals include—2 pensions, 5 military (2 no report), 1 Indian Affairs. [3] Includes: 2 pædiatric, 1 orthopædic, 5 convalescent, 3 industrial and 2 special. [4] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [5] Nine hospitals did not report patients' fees, 30 did not report other sources, 8 did not report total receipts and 8 did not report total expenditures. [6] Included in "All other expenditures". [7] Brantford Isolation Hospital's financial statistics included in Brantford General Hospital report. [8] No financial report for 3 industrial and 1 special hospitals.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
Manitoba.								
Hospitals by type	28	2	5	1	1	2	3[1]	3[2]
Training schools	15	–	–	1	–	2	–	1
Staff—								
Salaried physicians	29	2	–	3	6	3	17	4
Internes	57	–	–	4	–	–	1	8
Attending doctors	747	9	–	14	–	11	14	85
Graduate nurses	194	6	5	18	22	29	19	19
Nurses in training	704	–	–	36	–	136	–	46
Totals, Personnel	**1,643**	**12**	**5**	**83**	**160**	**163**	**77**	**122**
Hospitals with—								
X-Ray Department	22	1	–	1	1	1	2	2
Clinical Laboratory	12	1	–	1	1	2	2	2
Physical Therapy Department	7	–	–	–	1	–	2	2
Movements of Population (during 1931)—								
Admitted during year	42,786	614	4,724[3]	3,011	277	2,173	1,514	2,793
Live births	4,890	133	90	1,047	–	6	19	–
Totals, Under Treatment (excl. infants born in hospital)	**43,422**	**614**	**24**	**3,011**	**558**	**2,356**	**1,851**	**2,883**
Discharges (incl. infants born in hospital)	43,649	605	–	3,099	287	2,079	1,547	2,750
Deaths	1,459	13	–	37	41	131	19	57
Collective stay (hospital days) (excl. infants born in hospital)	549,215	5,862	–	42,693	100,570	98,506	54,120	47,860
Days' treatment to indigent patients[4]	(14) 14,498	(1) 30	–	(1) 172	–	(1) 350	–	(2) 12,687
Receipts (Maintenance)—								
Government and municipal grants $	813,104	–	5,000	31,556	231,552	88,800	–	31,641
Patients' fees $	802,486	9,794	–	45,506	33,218	17,866	–	11,902
Other sources $	111,783	262	735	7,148	–	798	–	72,060
Totals, Maintenance Receipts $	**1,727,373**	**10,056**	**5,735**	**84,210**	**264,770**	**107,464**	–	**115,603**
Disbursements (Maintenance)—								
Salaries, etc. $	777,619	6,189	8,006	29,859	110,590	114,247	85,392	83,500
Provisions $	282,766	3,037	–	26,894	59,110	53,018	28,562	27,066
Fuel, light, power and water $	170,377	1,093	–	11,199	24,391	53,917	9,135	15,975
All other $	404,340	3,956	1,226	46,134	89,421	71,620	42,279	69,529
Totals, Maintenance Expenditures $	**1,635,102**	**14,275**	**9,232**	**114,086**	**283,512**	**292,802**	**165,368**	**196,070**
Gross Receipts $	1,860,525	11,430	7,060	89,819	422,773	107,964	–	166,179
Gross Expenditures $	1,888,935	14,275	9,232	114,086	393,405	397,970	167,632	200,467

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[1] Dominion hospitals include: 1 pension, 1 military, and 1 Indian Affairs. [2] Includes 1 pædiatric, 1 orthopaedic, and 1 convalescent. [3] Nursing stations only. Figures give number attended. [4] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.		General Private and Private Maternity.		Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
		No.		No.	No.	No.	No.	No.	No.	No.
Saskatchewan.										
Hospitals by type		62[1]		36[2]	12	1	3	–	1[3]	2[4]
Training schools		16		–	–	–	–	–	–	–
Staff—										
Salaried physicians		13		–	–	–	13	–	1	1
Internes		16		–	–	–	4	–	–	–
Attending doctors		568		55	15	5	16	–	–	54
Graduate nurses		315		36	21	4	48	–	3	22
Nurses in training		604		–	–	–	–	–	–	–
Totals, Personnel		**1,754**		**76**	**31**	**6**	**337**	–	**8**	**75**
Hospitals with—										
X-Ray Department		46		4	–	–	3	–	1	–
Clinical Laboratory		34		1	–	–	3	–	1	–
Physical Therapy Department		15		1	–	–	3	–	1	–
Movement of Population (during 1931)—										
Admitted during year		44,815		1,292[5]	1,345	148	4,735	–	118	309
Live births		5,799		410	497	92	6	–	30	75
Totals, Under Treatment (excl. infants born in hospital)		**45,313**		**1,306**	**1,354**	**179**	**5,585**	–	**138**	**309**
Discharges (incl. infants born in hospital)		48,181		1,748	1,813	276	4,798	–	136	352
Deaths		2,424		38	37	1	142	–	8	8
Collective stay (hospital days) (excl. infants born in hospital)		602,800		12,811	18,629	13,018	293,485	–	7,843	10,939
Days' treatment to indigent patients[6]	(24)	22,144	(7)	305	–	–	–	–	–	–
Receipts (Maintenance)–										
Government and municipal grants $		597,490		–	15,973	–	293,379	–	–	6,060
Patients' fees $		965,332		20,071[7]	16,230	–	18,465	–	–	1,343
Other sources $		320,480		1,246	1,378	–	1,924	–	–	2,416
Totals, Maintenance Receipts $		**1,883,302**		**21,317**	**33,581**	[8]	**313,768**	–	–	**9,819**
Disbursements (Maintenance)—										
Salaries, etc. $		692,671		–	25,777	–	288,775	–	3,861	8,078
Provisions $		358,311		–	–	–	143,978	–	2,989	2,745
Fuel, light, power and water $		222,421		–	–	–	77,689	–	486	1,659
All other $		471,269		–	13,218	–	267,971	–	2,181	3,946
Totals, Maintenance Expenditures $		**1,744,672**		–	**38,995**	[8]	**778,413**	–	**9,517**	**16,428**
Gross Receipts $		2,521,392		21,197	33,581	[8]	313,768	–	–	20,767
Gross Expenditures $		2,463,109		23,760	38,995	[8]	778,413	–	12,923	16,428

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[1] St. Joseph's Hospital, Prelate. Sask., closed April, 1932. No report. [2] One general private hospital did not report. [3] Department of Indian Affairs hospital. [4] One maternity and 2 pædiatric. [5] Two general private hospitals did not report movement of population. [6] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [7] Fourteen hospitals did not report patients' fees, 15 did not report total receipts and 19 did not report total expenditures. [8] No report of financial standing.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—continued.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Others.
	No.	No.	No.	No.	No.	No.	No.	No.
Alberta.								
Hospitals by type	77	41[1]	-	2	1	5[2]	5[3]	3[4]
Training schools	12	-	-	-	-	1	-	-
Staff—								
Salaried physicians	18	3	-	-	4	1	12	5
Internes	34	-	-	-	3	-	-	-
Attending doctors	790	63	-	95	-	112	-	6
Graduate nurses	399	21	-	9	19	5	18	7
Nurses in training	722	-	-	-	-	7	-	1
Totals, Personnel	**2,087**	**78**	-	**22**	**107**	**16**	**72**	**15**
Hospitals with—								
X-Ray Department	51	5	-	-	1	-	1	1
Clinical Laboratory	37	3	-	-	1	1	2	1
Physical Therapy Department	16	1	-	-	-	-	3	1
Movement of Population (during 1931)—								
Admitted during year	52,981	877	-	640	203	151	2,563	95[5]
Live births	7,650	362	-	467	-	-	71	-
Totals, Under Treatment (excl. infants born in hospital)	**55,305**	**877**	-	**671**	**203**	**171**	**2,701**	**124**
Discharges (incl. infants born in hospital)	58,413	1,137	-	1,052	165	162	2,591	71
Deaths	1,977	23	-	12	36	4	44	2
Collective stay (hospital days) (excl. infants born in hospital)	725,040	8,235	-	14,470	74,728	3,972	57,438	11,599
Days' treatment to indigent patients[6]	(42) 41,216	(1) 12	-	(2)9,791	-	-	-	-
Receipts (Maintenance)—								
Government and municipal grants $	1,013,468	305	-	7,293	83,751	1,918	-	10,207
Patients' fees $	1,173,776	12,820[7]	-	12,680	5,243	663	-	1,343
Other sources $	260,788	352	-	6,668	-	-	-	6,946
Totals, Maintenance Receipts $	**2,448,032**	**13,477**[7]	-	**26,641**	**88,994**	**2,581**	-	**18,496**
Disbursements (Maintenance)—								
Salaries, etc. $	984,067	11,483[7]	-	10,914	129,435	21,923	78,918	10,198
Provisions $	491,193	6,684[7]	-	6,432	44,799	4,691	22,397	3,136
Fuel, light, power and water $	212,527	4,939[7]	-	2,109	10,328	2,043	9,108	1,117
All other $	617,671	5,011[7]	-	7,799	2,496	8,238	11,079	5,282
Totals, Maintenance Expenditures $	**2,305,458**	**28,117**[7]	-	**27,254**	**187,058**	**36,895**	**121,502**	**19,733**
Gross Receipts $	2,524,308	26,519[7]	-	26,641	120,121	2,581	-	18,496
Gross Expenditures $	3,039,716	28,837[7]	-	28,454	187,058	36,895	124,949	19,733

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[1] Five hospitals no report. [2] One no cases, 1 included in report of Royal Alexandra, Edmonton. [3] Includes 1 pension, 4 Indian Affairs. [4] Includes 1 orthopædic, 1 industrial, 1 convalescent. [5] Industrial hospital did not report movement of population or financial standing. [6] Figures in parentheses opposite days' treatment to indigent patients, indicate the number of hospitals reporting under this item. [7] Twenty-one hospitals did not report patients' fees, 5 did not report expenditures, 1 reported total receipts only.

3.—Hospital Statistics, by Provinces, with Movement of Hospital Population and Financial Statistics, calendar year 1931—concluded.

Province and Item.	General Public.	General Private and Private Maternity.	Red Cross.	Salvation Army.	Tuberculosis.	Isolation.	Dominion.	Other.
	No.	No.	No.	No.	No.	No.	No.	No.
British Columbia.								
Hospitals by type	68[1]	17[2]	2	1	1	1[3]	4[4]	9[5]
Training schools	15	-	-	-	1	-	-	-
Staff—								
Salaried physicians	61	-	-	-	5	-	6	1
Internes	40	-	-	-	-	-	1	-
Attending doctors	816	104	4	142	5	-	2	14
Graduate nurses	528	24	5	6	32	-	22	12
Nurses in training	830	-	-	-	12	-	-	-
Totals, Personnel	**2,696**	**51**	**9**	**46**	**200**	-	**106**	**63**
Hospitals with—								
X-Ray Department	58	2	1	-	1	-	1	-
Clinical Laboratory	28	1	-	1	1	-	3	-
Physical Therapy Department	15	-	-	-	-	-	1	2
Movement of Population (during 1931)—								
Admitted during year	57,289	914[6]	433	889	241	-	1,793	336
Live births	5,978	344	68	850	-	-	-	-
Totals, Under Treatment (excl. infants born in hospitals)	**57,973**	**967**	**433**	**911**	**568**	-	**1,926**	**367**
Discharges (incl. infants born in hospitals)	59,351	1,189	427	1,761	237	-	1,737	179
Deaths	2,530	66	17	16	50	-	53	18
Collective stay (hospital days) (excl. infants born in hospitals)	943,687	19,480	4,996	11,621	120,654	-	52,778	37,867
Days' treatment to indigent patients[7]	(25) 30,300	(4) 7,696	-	(1)2,786	(1) 7,539	-	-	(9) 9,283
Receipts (Maintenance)–								
Government and municipal grants $	1,623,263	[8]	4,158	-	348,642	-	-	27,218
Patients' fees $	1,540,763	34,533[8]	2,778	41,808	3,863	-	-	38,011
Other sources $	196,230	18,786[8]	-	1,271	-	-	1,805[9]	9,749
Totals, Maintenance Receipts $	**3,360,256**	**53,319**[8]	**6,936**	**43,079**	**352,505**	-	**1,805**	**74,978**
Disbursements (Maintenance)—								
Salaries, etc. $	1,782,543	25,580[8]	4,404	21,484	147,698	-	163,116	34,581
Provisions $	682,794	14,954[8]	2,452	11,507	74,788	-	28,614	17,311
Fuel, light, power and water $	253,285	4,883[8]	2,627	6,207	49,114	-	17,725	4,776
All other $	883,280	8,817[8]	1,782	12,483	41,614	-	24,304	25,918
Totals, Maintenance Expenditures $	**3,601,902**	**54,234**[8]	**11,265**	**51,681**	**313,214**	-	**233,759**	**82,586**
Gross Receipts $	4,113,857	53,319[8]	9,330	46,974	353,505	-	1,805	96,403
Gross Expenditures $	4,450,149	56,068[8]	13,765	66,402	353,505	-	235,177	81,593

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[1] Three hospitals did not report. [2] One general private hospital did not report. [3] Closed during 1931. [4] Includes 1 pension, 1 military, 1 quarantine and immigration, 1 leper. [5] Includes 2 orthopædic, 7 convalescent (1 no report.) [6] One private maternity did not report movement of population. [7] Figures in parentheses opposite days' treatment to indigent patients indicate number of hospitals reporting under this item. [8] Three hospitals did not report financial standing. [9] Receipts from quarantine and immigration hospital.

Out-Patient Departments.—Out-patient departments as here reported include those institutions where medical or surgical treatment may be obtained either gratuitously or for a nominal fee, but which do not receive resident patients

Out-patient departments, or clinics, are operated independently or in connection with a hospital, medical college, university or other institution. The dispensary or clinic in connection with a hospital is generally the out-patient department of the hospital, and treats patients who do not occupy beds in the hospital. Sometimes, however, the out-patient department is kept distinct from the hospital and is a separate institution with its own staff, etc. The extension of out-patient services to patients of modest means has far-reaching and beneficial effects. It may replace admission to a hospital, or may serve to secure necessary and beneficial hospitalization. As a general rule, out-patient departments are subsidized from the funds of the general hospital and separate records are not kept. Until a uniform system of accounting is adopted, it is not possible to give the average cost per patient.

4. Out-Patient Departments in connection with Hospitals, together with Patients Treated, calendar year 1931.

Province.	No. of Hospitals with Out-Patient Departments.	Numbers of Patients Treated in Out-Patient Departments.			Number of Treatments Given in Out-Patient Departments.
		Pay.	Free.	Total.	
Nova Scotia	7	141	3,168	3,309	21,092
New Brunswick	11	1,357	1,183	8,008[1]	5,140
Quebec	48	167,845	224,022	414,374[2]	869,042
Ontario	40	19,300	127,167	146,467	479,550
Manitoba	18	2,681	61,984	64,665	137,355
Saskatchewan	17	1,124	2,684	3,808	8,914
Alberta	25	3,023	16,447	21,688[3]	45,610
British Columbia	25	6,156	38,737	44,893	53,769
Canada	**191**[4]	**201,627**	**475,392**	**707,212**[5]	**1,620,472**

[1] Including 5,468 patients not classified.
[2] Including 22,507 patients not classified.
[3] Including 2,218 patients not classified.
[4] Two out-patient departments in Nova Scotia, 7 in Quebec, 5 in Ontario, 2 in Manitoba, 6 in Saskatchewan, 4 in Alberta and 5 in British Columbia kept no records of patients.
[5] See footnotes 1, 2 and 3.

Subsection 2.—Mental Hospitals.

Census statistics regarding number of insane and feeble-minded in Canada were first made in connection with the decennial census of 1871, and general data were collected under the heading: "people of unsound mind". The census of 1911 gave the number of insane and "idiotic" persons in Canada as 13,355, and a yearly report for that year showed 9,671 patients in mental institutions. In 1921 figures concerning the number of patients in mental hospitals gave the number of insane as 21,516. Very little reliance can be placed on the figures before 1921, as the information was collected for patients in provincial mental hospitals only, and did not include a large number of insane and feeble-minded in other institutions.

The Census of Mental Institutions of Canada was made a special feature of the decennial census of 1931, seven special schedules being used in the survey. Special features of the census were: separate classification of first admissions from re-admissions; classification of resident patients with particular reference to mental diagnosis; collection of data *re* ex-service men; urban and rural data; paroles; administrative personnel; values and acreages of hospital plants, etc.

The total number of institutions caring for the insane in 1932 was 59, including 34 public hospitals for the insane, 4 private hospitals for the insane, 5 public hospitals for the feeble-minded, 10 county asylums, 3 private institutions for children of retarded mental development and 3 psychiatric hospitals for the insane.

Of the above 59 institutions, 56 reported as to staff and patients, and 53 regarding their finances. Statistics of capacity, staff and finances are presented by provinces in Table **5**, and statistics of the movement of patient population in Table **6**.

5.—Statistics of Capacity, Staff and Finances of Mental Institutions in Canada, by Provinces, 1932.

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	No.	No.	No.	No.	No.
Numbers of institutions[1]	1	17[1]	1	9	16
Normal capacities	300	1,951	900	8,875	11,661
Staff—					
Doctors—Full time	1	4	2	55	110
" Part time	–	16	1	16	13
Graduate nurses	7	27	45	167	281
Other nurses	9	50	–	711	572
Totals, Staff	**58**	**321**	**84**	**1,609**	**2,734**
Institutions reporting financial standing	1	17	1	8[2]	14[2]
Receipts—					
Government and municipal grants $	78,695	459,541	177,382	1,648,946	3,115,367
Fees from paying patients $	3,210	20,223	30,180	363,056	1,020,570
Received from other sources $	1,070	3,791	197	458,391	540,369
Totals, Receipts $	**82,975**	**483,555**	**207,759**	**2,470,393**[2]	**4,676,306**[2]
Expenditures—					
Salaries $	–	189,050	53,067	526,978	2,280,682
Provisions $	–	122,279	61,847	460,381	633,594
All other expenditures for maintenance $	82,975	150,832	92,845	766,459	1,685,514
Total expenditures for maintenance $	82,975	462,161	207,759	1,753,818	4,599,790
New buildings and improvements $	–	12,847	–	444,569	–
Expenditure for other purposes $	–	6,341	–	263,677	3,543
Totals, Expenditures $	**82,975**	**481,349**	**207,759**	**2,462,064**[2]	**4,603,333**[2]

Item.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada.
	No.	No.	No.	No.	No.
Numbers of institutions[1]	3[1]	2	3	4	56[1]
Normal capacities	2,217	2,450	1,875	2,685	32,910
Staff—					
Doctors—Full time	15	8	10	12	207
" Part time	–	–	–	2	48
Graduate nurses	54	7	29	25	588
Other nurses	107	92	72	113	1,771
Totals, Staff	**526**	**403**	**344**	**526**	**6,605**
Number of institutions reporting financial standing	3	2	3	4	53[2]
Receipts—					
Government and municipal grants $	754,352	707,407	797,635	1,381,396	9,120,721
Fees from paying patients $	63,296	99,480	103,317	178,520	1,881,852
Received from other sources $	21,077	41,710	61,453	404	1,128,462
Totals, Receipts $	**838,725**	**848,597**	**962,405**	**1,560,320**	**12,131,035**[2]
Expenditures—					
Salaries $	386,668	386,397	496,221	452,808	4,771,871
Provisions $	182,870	148,627	99,999	260,809	1,970,406
All other expenditures for maintenance $	244,923	266,994	233,328	317,990	3,841,860
Total expenditures for maintenance $	814,461	802,018	829,548	1,031,607	10,584,137
New buildings and improvements $	7,309	46,579	131,811	520,992	1,146,107
Expenditures for other purposes $	17,955	–	2,394	–	293,910
Totals, Expenditures $	**839,725**	**848,597**	**963,753**	**1,552,599**	**12,042,151**[2]

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[1] Halifax City Home, Halifax, N.S., and Manitoba Psychopathic Hospital, Winnipeg, Man., did not furnish reports.

[2] The Ste. Anne's Hospital, Ste. Anne de Bellevue, Que., The Ontario Hospital, Guelph, Ont., and the Westminster Psychopathic Hospital, London, Ont., could not furnish separate financial reports.

6.—Movement of Patient Population in Mental Hospitals of Canada, by Provinces, 1932.

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	No.	No.	No.	No.	No.
Institutions reporting[1]	1	17	1	9	16
Normal capacities	300	1,951	900	8,875	11,661
Patients at Jan. 1—					
Insane	242	1,332	766	7,508	9,582
Mental deficients (without psychosis)	8	258	81	2,225	1,814
Epileptics (without psychosis)	–	–	–	139	224
Totals, Patients	250	1,590	847	9,872	11,620
ADMISSIONS:—					
First admissions:					
Insane	41	273	121	1,666	2,663
Mental deficients (without psychosis)	4	30	14	402	359
Epileptics (without psychosis)	–	–	–	26	65
Totals	45	303	135	2,094	3,087
Readmissions:					
Insane	37	114	45	378	635
Mental deficients (without psychosis)	7	1	–	31	30
Epileptics (without psychosis)	–	–	–	1	4
Totals	44	115	45	410	669
Transfers:					
Insane	–	23	–	36	303
Mental deficients (without psychosis)	–	–	–	51	47
Epileptics (without psychosis)	–	–	–	1	8
Totals	–	23	–	88	358
Totals, Admissions:					
Insane	78	410	166	2,080	3,601
Mental deficients (without psychosis)	11	31	14	484	436
Epileptics (without psychosis)	–	–	–	28	77
Grand Totals	**89**	**441**	**180**	**2,592**	**4,114**
SEPARATIONS—					
Discharges:					
Insane	43	325	60	1,004	2,249
Mental deficients (without psychosis)	5	8	1	49	77
Epileptics (without psychosis)	–	–	–	6	23
Totals	48	333	61	1,059	2,349
Transfers:					
Insane	–	14	–	28	332
Mental deficients (without psychosis)	–	9	–	60	26
Epileptics (without psychosis)	–	–	–	–	–
Totals	–	23	–	88	358
Deaths:					
Insane	27	105	63	646	745
Mental deficients (without psychosis)	2	10	6	78	60
Epileptics (without psychosis)	–	–	–	4	23
Totals	29	115	69	728	828
Totals, Separations:					
Insane	70	444	123	1,678	3,326
Mental deficients (without psychosis)	7	27	7	187	163
Epileptics (without psychosis)	–	–	–	10	46
Grand Totals	**77**	**471**	**130**	**1,875**	**3,535**
PATIENTS AT DEC. 31:—					
Insane	250	1,298	809	7,910	9,857
Mental deficients (without psychosis)	12	262	88	2,522	2,087
Epileptics (without psychosis)	–	–	–	157	255
Totals, Patients	262	1,560	897	10,589	12,199

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[1] The Halifax City Home, Halifax, N.S., and the Manitoba Psychopathic Hospital, Winnipeg, Man., did not furnish reports.

6.—Movement of Patient Population in Mental Hospitals of Canada, by Provinces, 1932—concluded.

Item.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada.
	No.	No.	No.	No.	No.
Institutions reporting[1]	3[1]	2	3	4	56[1]
Normal capacities	2,217	2,450	1,875	2,685	32,910
Patients at Jan. 1:					
Insane	1,850	1,940	1,476	2,397	27,093
Mental deficients (without psychosis)	435	425	238	376	5,860
Epileptics (without psychosis)	–	–	43	–	406
Totals, Patients	2,285	2,365	1,757	2,773	33,359
ADMISSIONS:—					
First admissions:					
Insane	153	428	381	498	6,224
Mental deficients (without psychosis)	56	32	42	51	988
Epileptics (without psychosis)	–	–	2	–	93
Totals	209	460	425	549	7,307
Readmissions:					
Insane	193	160	91	137	1,790
Mental deficients (without psychosis)	3	6	4	9	91
Epileptics (without psychosis)	–	–	–	–	5
Totals	196	166	95	146	1,886
Transfers:					
Insane	–	–	117	–	479
Mental deficients (without psychosis)	1	–	10	–	109
Epileptics (without psychosis)	–	–	–	–	9
Totals	1	–	127	–	597
Totals, Admissions:					
Insane	346	588	589	635	8,493
Mental deficients (without psychosis)	60	38	56	60	1,190
Epileptics (without psychosis)	–	–	2	–	107
Grand Totals	**406**[1]	**626**	**647**	**695**	**9,790**[1]
SEPARATIONS:—					
Discharges:					
Insane	119	266	296	348	4,710
Mental deficients (without psychosis)	21	12	18	17	208
Epileptics (without psychosis)	–	–	1	–	30
Totals	140	278	315	365	4,948
Transfers:					
Insane	–	–	120	–	494
Mental deficients (without psychosis)	1	–	6	–	112
Epileptics (without psychosis)	–	–	1	–	1
Totals	1	–	127	–	597
Deaths:					
Insane	121	139	68	176	2,090
Mental deficients (without psychosis)	12	13	7	16	204
Epileptics (without psychosis)	–	2	4	–	31
Totals	133	15	79	192	2,325
Totals, Separations:					
Insane	240	405	484	524	7,294
Mental deficients (without psychosis)	34	25	31	33	514
Epileptics (without psychosis)	–	–	6	–	62
Grand Totals	**274**[1]	**430**	**521**	**557**	**7,870**[1]
PATIENTS AT DEC. 31:—					
Insane	1,956	2,123	1,581	2,508	28,292
Mental deficients (without psychosis)	461	438	263	403	6,536
Epileptics (without psychosis)	–	–	39	–	451
Totals, Patients	2,417	2,561	1,883	2,911	35,279

[1] The Halifax City Home, Halifax, N.S., and the Manitoba Psychopathic Hospital, Winnipeg, Man., did not report.

Subsection 3.—Child-Caring Institutions, Refuges for Adults, Homes for Incurables, etc.[1]

Although homes for incurables supply maintenance, nursing, medical and surgical aid to persons suffering from chronic and incurable diseases, the nature of the services given is such as to call for a special tabulation. Many hospitals for incurables care not only for those suffering from incurable diseases but also for the aged and indigent, and some even take care of orphans of both sexes.

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[1] For census material on child-caring institutions, day nurseries and refuges for adults, see 1932 Year Book, pp. 893-895.

In the case of general hospitals the service given both on economic and humanitarian grounds is to restore the patient to working efficiency in the community as soon as possible. The hospital or home for incurables looks after the patient whose affliction is of a more or less permanent nature incapacitating him from any possibility of earning a living. The movement of population is necessarily slow, discharges being generally due to death. The class of care given differs from that given in general hospitals, owing to the fact that the inmates tend to become institutionalized and need the care of a physician less frequently.

Summarized statistics of the 19 homes and hospitals for incurables reporting for 1931 will be found in Table 7.

7.—Summary Statistics of Homes and Hospitals for Incurables, 1931.

NOTE.—Besides these hospitals and homes which are strictly for incurables there are thirteen institutions in the province of Quebec which, although not hospitals for incurables, undertake the care of them.

Item.	New Brunswick.	Quebec.	Ontario.	Saskatchewan.	Alberta.	British Columbia.	Canada.
	No.	No.	No.	No.	No.	No.	No.
Numbers of institutions	1	6	6[1]	2	3	1	19
Bed capacities	35	986	826	156	155	180	2,338
STAFF:							
Salaried physicians	–	7	5	1	–	1	14
Graduate nurses	1	4	57	2	–	4	68
Total personnel	12	541	360	32	19	40	1,004
Averages, patients per day	34	721	742	152	131	177	1,957
Admitted during 1931	8	365	322	43	63	65	866
Totals under treatment during 1931	34	888	1,047	195	198	245	2,607
Numbers discharged during 1931	1	254	92	19	36	26	428
Deaths during 1931	8	102	215	25	26	45	421
Collective days' stay during 1931	12,410	260,676	270,454	54,926	45,759	64,672	708,897
Patients paying wholly for maintenance	11	265	249	34	8	14	581
Patients paying part maintenance	9	117	148	16	6	10	306
Patients who received free care but were paid for by provincial, municipal and other funds	–	325	616	99	176	155	1,371
Indigent patients not recognized by any municipality	14	181	34	46	8	66	349
RECEIPTS—							
Government grants and public maintenance receipts $	500	32,394	463,489	48,763	30,330	7,997	583,473
Received from paying patients $	6,983	61,548	106,556	4,320	11,343	63,583	254,333
Received from all other sources $	11,117	71,842	56,079	–	3,563	15,399	158,000
Totals, Receipts $	**18,600**	**165,784**	**626,124**[1]	**53,083**	**45,236**	**86,979**	**995,806**
EXPENDITURES—							
Salaries and wages $	5,976	32,487	196,876	16,233	13,846	43,705	309,122
Provisions (food) $	3,980	49,589	104,588	15,113	14,615	23,600	211,485
Fuel, power, light and water $	2,110	22,405	41,553	3,895	3,393	5,343	78,699
All other expenditures $	2,731	104,943	202,099	8,328	12,199	16,208	346,509
Totals, Expenditures $	**14,797**	**209,424**	**545,116**[1]	**43,569**	**44,053**	**88,856**	**945,815**

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[1] St. Peter's Infirmary, Hamilton, was incorporated as a home for incurables in November, 1931. It is not included in this report.

CHAPTER XXVII.—JUDICIAL AND PENITENTIARY STATISTICS.[1]

Canadian Criminal Law and Procedure.—The system under which justice is administered in a State is never rigid. This is neither expedient nor indeed possible. The judicial system must grow and adapt itself to the requirements of the people, and the exact limits of the powers of the Dominion and provincial legislative bodies have required and will still require added definition by the courts.

The exclusive legislative authority of the Parliament of Canada extends to criminal law throughout the Dominion. This law is based on the common law of England, built up through the ages and consisting first of customs and usages and later of principles enunciated by generations of judges and introduced into Canada, as regards criminal law, by Royal Proclamation, 1763.

The judical systems of the provinces as they exist to-day are based upon the British North America Act of 1867. Section 91 provides that "the exclusive legislative authority of the Parliament of Canada extends to...the criminal law, except the constitution of courts of criminal jurisdiction, but including the procedure in criminal matters". In each province (sec. 92, ss. 14), the Legislature may exclusively make laws in relation to "the administration of justice in the province, including the constitution, maintenance and organization of provincial courts, both of civil and of criminal jurisdiction and including procedure in civil matters in those courts". The Parliament of Canada, may however, (Sec. 101) establish any additional courts for the better administration of the laws of Canada.

It is frequently difficult to distinguish between "Law" and "Procedure". Procedure may be interpreted to relate simply to the organic working of the courts, but in a wider sense it may also affect the rights or alter the legal relations arising out of any given set of facts.

The mass of Statutes resulting from the fact that, prior to Confederation, each province had its own criminal jurisprudence, caused great and increasing inconvenience. This led to the adoption of various consolidation Acts, the chief of which are the Criminal Law and Amendment Acts of 1869 and the Criminal Procedure Act of 1886. These Acts dealt exhaustively with procedure in respect of indictable and non-indictable offences, jurisdiction of justices of the peace, juvenile offenders, speedy trials, criminal law, schedules and forms, etc.

In the meantime various efforts had been made in England for the reduction of the criminal law of that country into the form of a code, culminating in a draft code, submitted to the Imperial House of Commons in 1880. The question then arose as to the desirability of codifying the Canadian law. Objections were raised that codification would arrest the development of the law and its gradual adaptation to the habits and wants of the community, and would substitute a fixed, inelastic system for one which possessed the power of adjustment to circumstances. But the advantages of a codification of the law of crimes were finally so manifest that a Bill founded on the English draft code of 1880, Stephen's Digest of Criminal Law,

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[1] Revised by H. M. Boyd, Acting Chief Statistician on Criminal Statistics, Dominion Bureau of Statistics. The fifty-fifth Annual Report of Statistics of Criminal and Other Offences, for the year ended Sept. 30, 1931, is obtainable on application, from the Dominion Bureau of Statistics.

Burbidge's Digest of the Canadian Criminal Law, and on the Canadian statutory law, and introduced by the then Minister of Justice, Sir John Thompson, passed both Houses and became law July 1, 1893.

Crimes were formerly divided into two main classes: felonies, and misdemeanours. A felony was a crime involving forfeiture of property and of civil rights. The code has abolished this distinction and has classified offences as indictable and non-indictable. The term "indictable" means an offence which is triable on an indictment, that is to say the legal process by which a bill of indictment is preferred to, and presented by, a grand jury. An indictment differs from an information which rests only on presentation by the prosecuting authority, and properly from a presentment, which is an accusation originating with the grand jury. The word is sometimes loosely used, however, to include an information or presentment or both. Many cases of indictable offences are proceeded with, without a formal indictment. Furthermore certain cases triable on indictment may also be disposed of summarily by a magistrate, according to the severity or circumstances of the cases.

Non-indictable offences include cases usually dealt with summarily by police magistrates under the Summary Convictions Act, and comprise breaches of municipal regulations and other minor offences.

According to the provisions of the code, indictable offences are triable by jury but, in cases other than those listed below, the accused is accorded the right of election whether he be tried by jury, or before a judge without the intervention of a jury under the Speedy Trials Act, or before a magistrate under the Summary Trials Act. The jurisdiction of the magistrate is absolute, however, in certain cases and does not depend on the consent of the accused. Cases triable by jury without the consent of the accused are: treason, treasonable offences, assaults on the King, mutiny, unlawfully obtaining and communicating official information, taking of oath to commit certain crimes, seditious offences, libels on foreign sovereigns, piracy, corruption of officers employed in prosecuting offenders, frauds on the Government, breach of trust of public officers, municipal corruption, selling of appointments to any office, murder, attempt to murder, conspiracy to murder, accessory after the fact to murder, manslaughter, rape, attempt to commit rape, defamatory libel, combination in restraint of trade, for conspiring or attempting to commit, or being accessory after the fact to any of the above offences, also for bribery or undue influence, personation or other corrupt practice under the Dominion Elections Act. Also, where an offence is punishable with imprisonment for a period exceeding five years the Attorney General may require the charge to be tried by a jury.

In the province of Quebec a district magistrate has powers extending beyond those of a magistrate in any other province. He has the same jurisdiction as a county court judge in Ontario, and disposes of cases under the Speedy Trials Act, whereas the jurisdiction of the magistrates of other provinces extends only to the Summary Convictions Act and the Summary Trials Act.

Capital cases for the first twelve or fifteen years after Confederation included, besides murders, death sentences for attempts at murder, piracy, burglary, violation of females and levying war. The list of capital offences is now: levying war, murder, piracy in cases of violence, rape, and treason. This is a drastic modification in the code from that which obtained a century and a half ago. In 1764, according to Blackstone, there were in England 160 capital offences on the Statute Book. It is stated that there was a strong feeling against the accompanying wholesale hangings and that judges and juries resorted to all sorts of subterfuges to evade the letter of the law. The work of practical reform and modification was slow, however, owing to the opposition of the House of Lords, but the days of the indiscriminating infliction of capital punishment ended with the passage of the Reform Bill in 1832, at which time forty kinds of forgery and many less serious offences were still capital crimes.

The statistics presented in the tables that follow, which are summarized from the Annual Report of Statistics of Criminal and Other Offences, are collected directly from the criminal courts in the different judicial districts throughout the Dominion. There are 159 judicial districts, including 4 sub-districts, divided as to provinces as follows: Prince Edward Island 3, Nova Scotia 18, New Brunswick 15, Quebec 25, Ontario 47, Manitoba 6, Saskatchewan 22, Alberta 14, British Columbia 8 and Yukon 1. The figures for the Northwest Territories are obtained from the reports of the Royal Canadian Mounted Police.

Section 1.—General Tables.

The statistics relate to years ended Sept. 30, the latest report being for 1931. Beginning with the report for 1922, an enlargement of the classification of offences has been adopted, by which offences of juvenile offenders are compiled separately from those of adults. The term "indictable" applies to offences of adults only, similar offences committed by juveniles being termed "major" offences; similarly, "non-indictable" offences of adults are termed "minor" offences when attributed to juveniles. All current tables have been worked out for 1922 and subsequent years in accordance with the new classification, but a comparative historical table, giving the totals for different classes of criminal offences and minor offences *including those of juvenile delinquents*, is here published (Table **1**), together with a more detailed table for recent years (Table **2**). In the consideration of the former it should be remembered that, while the criminal code undergoes little change over periods of time, the figures of summary convictions depend very much upon the changes in the customs of the people, and are apt to increase with the increasing urbanization of the population. The most significant column of Table **1** is the figure of criminal offences per 100,000 of population. Attention may be drawn to the increase in the proportion of both criminal offences and minor offences to population in the past year, convictions for criminal offences having risen from 284 per 100,000 population in 1921 to 425 per 100,000 population in 1931 and convictions for minor offences from 1,732 per 100,000 in 1921 to 3,113 per 100,000 in 1931.

It should be understood that the classification of offences in these general tables is irrespective of the mode of procedure. That is to say, the "criminal" cases include many indictable offences disposed of summarily under the Summary Trials Act. Hence any addition of indictable and major and minor offences, as shown in other tables, will not agree with the figures given in Tables **1** and **2**. The object here is to show a broad historical record of criminal and minor offences respectively.

1.—Convictions for Criminal Offences, by Classes, and Total Convictions for Minor Offences, years ended Sept. 30, 1900-31, with Proportions to Population.

NOTE.—For figures for the years 1876-99 see p. 993 of the 1930 Year Book.

Year.	Criminal Offences.							Minor Offences, Total and Ratios.			Total Criminal and Minor Offences.
	Offences against—			Other Felonies and Misdemeanours.	Total and Ratios of Criminal Offences.						
	the Person.	Property with Violence.	Property without Violence.								
	No.	No.	No.	No.	No.	p.c. of all offences.	per 100,000 pop.	No.	p.c. of all offences.	per 100,000 pop.	No.
1900 ..	4,598	413	4,571	411	9,993	24·0	189	31,661	76·0	597	41,654
1901 ..	4,698	451	4,441	384	9,974	23·7	186	32,174	76·3	599	42,148
1902...	4,773	413	4,541	363	10,090	23·1	184	33,446	76·9	609	43,536
1903...	5,480	543	4,944	505	11,472	22·8	203	38,911	77·2	689	50,383
1904...	5,919	552	5,295	528	12,294	22·4	211	42,652	77·6	732	54,946
1905...	5,694	656	5,711	812	12,873	20·6	214	49,686	79·4	828	62,559
1906...	6,215	645	6,425	1,078	14,363	20·3	232	56,540	79·7	912	70,903
1907...	6,651	681	6,907	807	15,046	19·0	235	64,124	81·0	1,000	79,170
1908...	7,379	893	7,973	1,069	17,314	19·5	261	71,320	80·5	1,077	88,634
1909...	6,586	848	7,771	1,332	16,537	18·4	243	73,415	81·6	1,080	89,952
1910...	7,793	943	8,191	1,131	18,058	17·5	258	84,845	82·5	1,214	102,903
1911...	8.352	977	9,024	1,194	19,547	17·3	271	93.713	82·7	1,300	113,260
1912...	9,371	1,195	10,626	1,540	22,732	15·5	308	123,795	84·5	1,675	146,527
1913...	11,444	1,472	12,721	1,724	27,361	15·8	359	145,777	84·2	1,910	173,138
1914...	12,136	1,810	14,645	1,952	30,543	16·7	388	152,492	83·3	1,935	183,035
1915...	10,664	2,234	14,269	1,525	28,692	18·7	360	124,363	81·3	1,558	153,055
1916...	9,327	1,478	11,018	1,459	23,282	18·8	291	100,509	81·2	1,256	123,791
1917...	6,852	1,321	9,886	1,271	19,330	16·9	240	94,681	83·1	1,175	114,011
1918...	7,292	2,049	10,743	1,390	21,474	17·4	264	101,795	82·6	1,249	123,269
1919...	7,731	2,606	11,508	1,656	23,501	18·1	283	106,518	81·9	1,282	130,019
1920...	8,281	2,310	11,634	2,059	24,284	14·9	284	138,424	85·1	1,618	162,708
1921...	8,197	2,609	12,059	2,081	24,946	14·2	284	152,227	85·9	1,732	177,173
1922...	7,291	2,783	11,607	2,610	24,291	15·3	272	134,049	84·7	1,503	158,340
1923...	7,550	2,076	11,482	3,075	24,183	15·1	268	135,069	84·8	1,499	159,252
1924...	7,595	2,536	12,790	2,635	25,556	15·3	279	141,663	84·7	1,549	167,219
1925 ..	7,826	2,749	13,892	2,644	27,111	15·3	292	150,672	84·7	1,621	177,783
1926...	7,799	2,296	14,262	2,679	27,036	13·8	286	169,171	86·2	1,790	196,207
1927...	8,343	2,671	15,154	2,809	28,977	13·1	301	191,285	86·9	1,985	220,262
1928...	9,140	2,991	16,072	3,856	32,059	11·6	326	243,123	88·4	2,472	275,182
1929...	10,392	3,529	17,271	4,001	35,193	10·9	351	286,773	89·1	2,859	321,966
1930...	11,052	4,647	18,498	6,584	40,781	11·8	400	304,860	88·2	2,986	345,641
1931...	11,773	5,288	21,528	5,475	44,064	12·0	425	323,024	88·0	3,113	367,088

2.—Convictions for Criminal and Minor Offences, by Class of Offence, Compared as to Numbers and Ratios, years ended Sept. 30, 1927-31 (Including Juveniles).

A.—NUMBERS.

Class of Offence.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.
Offences against the person	8,343	9,140	10,392	11,052	11,773
Offences against property with violence	2,671	2,991	3,529	4,647	5,288
Offences against property without violence	15,154	16,072	17,271	18,498	21,528
Other felonies and misdemeanours	2,809	3,856	4,001	6,584	5,475
Totals, Criminal Offences	28,977	32,059	35,193	40,781	44,064
Breach of municipal Acts and by-laws	110,532	156,758	181,199	200,920	226,822
Breach of liquor laws	12,487	15,279	19,339	18,139	16,193
Drunkenness	31,177	33,229	38,802	35,797	29,151
Vagrancy	7,877	8,623	11,782	11,161	15,565
Loose, idle and disorderly	5,649	5,556	5,044	7,641	4,128
Keeping bawdy houses and inmates thereof	3,206	3,003	5,350	4,650	4,407
Miscellaneous minor offences	20,363	20,675	25,257	26,552	26,758
Totals, Minor Offences	191,291	243,123	286,773	304,860	323,024
Grand Totals	**220,268**	**275,182**	**321,966**	**345,641**	**367,088**

2.—Convictions for Criminal and Minor Offences, by Class of Offence, Compared as to Numbers and Ratios, years ended Sept. 30, 1927-31 (Including Juveniles)—concluded.

B.—RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.

Class of Offence.	1927.		1928.		1929.		1930.		1931.	
	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.
Offences against the person	3·8	87	3·3	93	3·2	104	3·2	108	3·2	113
Offences against property with violence	1·2	28	1·1	30	1·1	35	1·3	46	1·4	51
Offences against property without violence	6·9	157	5·8	164	5·3	172	5·4	181	5·9	208
Other felonies and misdemeanours	1·2	29	1·4	39	1·3	40	1·9	64	1·5	53
Totals, Criminal Offences	13·1	301	11·6	326	10·9	351	11·8	399	12·0	425
Breach of municipal Acts and by-laws	50·2	1,146	57·0	1,594	56·3	1,807	58·1	1,967	61·8	2,186
Breach of liquor laws	5·7	130	5·6	155	6·0	193	5·3	178	4·4	156
Drunkenness	14·2	324	12·1	338	12·0	387	10·4	351	7·9	281
Vagrancy	3·6	82	3·1	88	3·6	117	3·2	109	4·2	150
Loose, idle and disorderly	2·6	59	2·0	56	1·6	50	2·2	75	1·1	40
Keeping bawdy houses and inmates thereof	1·4	33	1·0	31	1·7	53	1·3	46	1·2	42
Miscellaneous minor offences	9·2	211	7·6	210	7·9	252	7·7	260	7·3	258
Totals, Minor Offences	86·9	1,985	88·4	2,472	89·1	2,859	88·2	2,986	88·0	3,113
Grand Totals	**100·0**	**2,236**	**100·0**	**2,798**	**100·0**	**3,210**	**100·0**	**3,386**	**100·0**	**3,538**

The recent trend of total convictions, including those of juveniles, and of sentences imposed, is shown by provinces for the years 1925 to 1931 in Table **3.** Death sentences, which numbered 28 in 1919 and 26 in 1920, fell to 15 in 1923, rose to 22 in 1924, dropped steadily to 12 by 1927, rose again to 19 in 1928, to 26 in 1929, then dropped to 17 in 1930 and rose to 25 in 1931.

3.—Convictions and Sentences for all Offences, by Provinces, years ended Sept. 30, 1925-31.

Province.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.	No.	No.
Canada—							
Convictions	177,783	196,207	220,262	275,182	321,966	345,641	367,088
Sentences—							
Penitentiary	1,536	1,553	1,739	1,991	2,164	3,013	3,129
Gaol or fine	144,960	163,084	179,863	223,794	263,750	266,777	274,483
Reformatory	1,033	722	865	858	979	943	1,226
Death	18	15	12	19	26	17	25
Other sentences	30,236	30,833	37,783	48,520	55,047	74,891	88,225
Prince Edward Island—							
Convictions	256	365	427	716	845	975	910
Sentences—							
Penitentiary	1	4	4	10	6	2	6
Gaol or fine	202	324	405	669	814	956	871
Reformatory	6	–	3	–	3	6	4
Death	–	–	–	–	–	–	–
Other sentences	47	37	15	37	22	11	29
Nova Scotia—							
Convictions	3,830	4,629	5,308	5,710	7,395	7,499	6,725
Sentences—							
Penitentiary	119	131	78	158	144	118	132
Gaol or fine	2,953	3,776	4,553	4,752	6,479	6,720	5,971
Reformatory	98	94	70	59	67	65	45
Death	1	–	–	–	–	–	1
Other sentences	659	628	607	741	705	595	576

3.—Convictions and Sentences for All Offences, by Provinces, years ended Sept. 30, 1925-31—concluded.

Province.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.	No.	No.
New Brunswick—							
Convictions	2,766	2,713	3,080	3,617	4,589	4,727	5,380
Sentences—							
Penitentiary	54	23	25	50	57	49	108
Gaol or fine	2,305	2,412	2,628	3,095	4,091	4,130	4,524
Reformatory	23	27	47	42	39	53	40
Death	2	–	–	–	–	1	–
Other sentences	382	251	380	430	402	494	708
Quebec—							
Convictions	30,150	28,952	34,093	35,060	57,302	67,219	106,941
Sentences—							
Penitentiary	395	398	394	542	507	754	765
Gaol or fine	24,469	23,986	28,193	28,853	47,211	51,405	86,729
Reformatory	223	124	215	154	162	67	109
Death	3	3	4	5	9	5	6
Other sentences	5,060	4,441	5,287	5,506	9,413	14,988	19,332
Ontario—							
Convictions	91,107	101,263	112,364	158,338	165,829	178,795	168,069
Sentences—							
Penitentiary	515	520	659	685	596	926	834
Gaol or fine	73,260	83,348	89,602	127,140	133,534	135,315	118,674
Reformatory	470	252	303	341	451	430	736
Death	3	2	3	4	6	5	6
Other sentences	16,859	17,141	21,797	30,168	31,242	42,119	47,819
Manitoba—							
Convictions	13,605	17,100	19,626	23,210	30,100	30,540	27,002
Sentences—							
Penitentiary	142	221	133	199	291	303	528
Gaol or fine	9,749	12,185	13,645	16,016	21,684	19,561	14,737
Reformatory	134	151	144	146	151	176	168
Death	1	4	1	1	1	–	2
Other sentences	3,579	4,539	5,703	6,848	7,973	10,500	11,567
Saskatchewan—							
Convictions	9,986	10,944	10,018	11,201	13,677	14,386	13,760
Sentences—							
Penitentiary	54	48	46	45	99	115	115
Gaol or fine	9,032	9,927	8,901	9,965	12,317	12,631	11,822
Reformatory	22	11	20	27	24	48	35
Death	–	–	1	1	7	3	1
Other sentences	878	958	1,050	1,163	1,230	1,589	1,787
Alberta—							
Convictions	9,368	10,111	10,635	13,054	16,659	16,080	16,589
Sentences—							
Penitentiary	86	79	162	97	242	424	291
Gaol or fine	7,630	8,403	8,876	10,720	13,944	12,936	12,293
Reformatory	8	12	14	26	25	26	15
Death	2	–	2	2	1	1	6
Other sentences	1,642	1,617	1,581	2,209	2,447	2,693	3,984
British Columbia—							
Convictions	16,620	20,034	24,616	24,142	25,430	25,286	21,548
Sentences—							
Penitentiary	170	127	237	205	222	322	394
Gaol or fine	15,332	18,638	22,974	22,460	23,544	22,998	18,727
Reformatory	49	51	49	63	57	72	74
Death	6	6	1	6	2	1	3
Other sentences	1,063	1,212	1,355	1,408	1,605	1,893	2,395
The Territories—							
Convictions	95	96	95	134	140	134	164
Sentences—							
Penitentiary	–	2	1	–	–	–	1
Gaol or fine	28	91	86	124	132	125	135
Reformatory	–	–	–	–	–	–	–
Death	–	–	–	–	–	–	–
Other sentences	67	3	8	10	8	9	28

Section 2.—Indictable Offences of Adults.

The progress of a community, from the moral point of view, is often judged by the number of convictions for indictable offences, as these are less affected than non-indictable offences by extraneous circumstances and the varying methods of law enforcement in different areas and in different years. However, in the study of such statistics it is important to have comparable figures over a period of years, and these are set out by provinces for each year since 1900 in Table **4.** Again, in Table **5** are shown the numbers of charges and convictions and the percentages of acquittals for the 3 years ended Sept. 30, 1929-31, the figures indicating the percentage of acquittals in the latest years.

It will be noticed that during the thirty-two-year period covered by Table **4** crimes increased from 4,853 to 31,542, or 550 p.c. The increase in the population during the same period was but 95·7 p.c., revealing that the increase in the crime rate was between five and six times that of the population.

4.—Convictions of Persons 16 years of age and upwards for Indictable Offences, by Provinces, years ended Sept. 30, 1900-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.[1]	Total.
1900......	21	257	109	1,279	2,260	221	–	–	447	–	259	4,853
1901......	14	287	100	1,222	2,169	185	–	–	401	40	203	4,621
1902......	38	368	125	1,222	2,078	185	–	–	470	47	268	4,801
1903......	32	393	131	1,397	2,344	318	–	–	443	56	369	5,483
1904.....	26	368	108	1,614	2,645	408	–	–	365	51	472	6,057
1905.....	35	342	110	1,861	2,805	534	–	–	574	39	524	6,824
1906......	21	269	118	1,819	3,145	668	–	–	533	44	693	7,310
1907......	9	402	147	1,827	3,392	773	587	395	532	42	–	8,106
1908......	10	535	202	2,194	4,371	715	637	591	849	26	–	10,130
1909......	18	463	156	2,136	4,524	784	737	645	799	37	–	10,299
1910......	31	684	164	1,810	4,539	744	896	709	727	23	–	10,327
1911......	19	356	123	1,865	5,067	888	957	870	1,015	24	4	11,188
1912.....	11	657	107	2.052	5,456	1,121	1,204	1,513	1,532	26	7	13,686
1913......	8	598	140	2,336	6.272	1,331	1,594	1,908	1,794	26	–	16,007
1914.....	18	669	179	2,918	7,479	1,284	1,889	2,235	2,112	27	–	18,810
1915......	12	840	206	2,427	7.112	1,362	1,993	2,082	1,517	24	–	17,575
1916......	11	519	241	3,166	6,023	914	1,711	1,895	1,503	20	–	16,003
1917......	21	427	228	2,667	4,824	755	1,057	894	1,058	22	–	11,953
1918......	12	563	230	2,916	6,111	811	1,067	886	659	11	–	13,266
1919......	14	663	241	2,960	6,605	919	1,134	1,028	951	5	–	14,520
1920.....	4	580	375	2,517	6,707	987	1,467	1,233	1,212	6	–	15,088
1921......	15	712	313	2,654	7,548	1,159	1,220	1,263	1,282	3	–	16,169
1922.....	27	701	322	2,885	7,021	1,188	1,391	1,171	1,004	10	–	15,720
1923......	13	400	148	2,655	6,886	1,094	1,446	1,424	1,116	6	–	15,188
1924......	25	595	224	2,729	7,180	1,160	1,647	1,423	1,265	10	–	16,258
1925.....	3	624	244	3,084	7,751	1,215	1,654	1,254	1,385	2	3	17,219
1926.....	14	752	222	3,053	7,248	1,383	2,052	1,463	1,252	3	6	17,448
1927.....	14	680	287	3,621	7,962	1,457	1,492	1,483	1,833	3	4	18,836
1928	43	891	365	4,299	9,052	1,672	1,761	1,701	1,931	5	–	21,720
1929......	55	869	358	4,780	9,489	1,988	1,918	2,201	2,425	8	6	24,097
1930.....	59	875	354	5,540	11,774	2,272	2,355	2,525	2,694	6	3	28,457
1931......	57	1,184	461	5,737	12,000	3,102	2,716	2,887	3,385	8	5	31,542

[1] The decline after 1906 is due to the formation of the provinces of Saskatchewan and Alberta out of parts of the Northwest Territories.

5.—Charges, Convictions and Percentages of Acquittals for Indictable Offences, by Provinces, years ended Sept. 30, 1929-31.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

Province.	1929.			1930.			1931.		
	Charges.	Convictions.	Acquittals.	Charges.	Convictions.	Acquittals.	Charges.	Convictions.	Acquittals.
	No.	No.	p.c.	No.	No.	p.c.	No.	No.	p.c.
Prince Edward Island.....	68	55	19·1	63	59	22·2	75	57	24·0
Nova Scotia.............	1,283	869	32·3	1,279	875	31·6	1,728	1,184	31·4
New Brunswick..........	448	358	20·1	441	354	18·9	612	461	24·8
Quebec.................	5,919	4.780	23·1	7,407	5,540	25·2	7,255	5,737	20·9
Ontario.................	11,935	9,489	20·5	14,218	11,774	17·2	14,617	12,000	17·9
Manitoba................	2,281	1.988	12·9	2,585	2,272	12·1	3,543	3,102	12·5
Saskatchewan............	2,117	1,918	9·4	2,615	2,355	10·0	2,996	2,716	6·3
Alberta	2,638	2,201	16·6	2,983	2,525	15·3	3,454	2,887	14·4
British Columbia.........	2,862	2,425	15·2	3,146	2,694	14·3	3,889	3,385	12·1
The Territories..........	21	14	33·3	11	9	18·2	20	13	26·3
Totals.........	**29,572**	**24,097**	**18 5**	**34,751**	**23,457**	**18·1**	**38,189**	**31,542**	**17·9**

Classes of Indictable Offences.—Indictable offences are divided under the Canadian system into six main classes, as follows: offences against the person, offences against property with violence, offences against property without violence, malicious offences against property, forgery and other offences against the currency, and other indictable offences. Convictions in all classes except Class V show an increase between 1929 and 1931. Details by offences are given in Table **6** and the details of the disposition of the charges in Table **7**, which shows, among other information, that convictions of females numbered 2,607 in 1931 as against 2,660 in 1930, — the first decrease in four years; as recently as 1924 the figure was only 1,826. Details as to occupation, conjugal condition, educational status, age, use of liquors, birthplace, religion and residence of those convicted of indictable offences are given in Table **8**.

6.—Indictable Offences, by Classes, years ended Sept. 30, 1929-31.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

Class and Offence.	1929.		1930.		1931.	
	Charges.	Convictions.	Charges.	Convictions.	Charges.	Convictions.
	No.	No.	No.	No.	No.	No.
CLASS I.—OFFENCES AGAINST THE PERSON.						
Murder	50	26	54	17	49	25
Murder, attempt to commit	20	12	28	12	49	32
Manslaughter	111	59	130	51	144	52
Abortion and concealing birth of infants	25	16	42	29	47	32
Rape and other crimes against decency	681	402	741	458	764	487
Procuration	56	34	51	38	65	34
Bigamy	52	40	55	50	62	47
Shooting, stabbing and wounding	185	143	266	182	252	152
Assault on females incl. assault on wife	221	182	256	232	221	189
Aggravated assault	1,273	892	1,340	910	1,412	909
Assault on police officer	611	557	589	534	710	653
Assault and battery	1,669	1,310	1,780	1,358	1,860	1,427
Refusal to support family	318	193	396	264	430	269
Wife desertion	24	19	9	7	20	12
Causing injury by fast driving	111	62	114	76	118	81
Various other offences against the person	103	68	167	116	121	82
Totals	**5,510**	**4,015**	**6,018**	**4,314**	**6,324**	**4,483**
CLASS II.—OFFENCES AGAINST PROPERTY WITH VIOLENCE.						
Burglary, house, warehouse, and shop-breaking	2,526	2,298	3,575	3,268	4,030	3,672
Robbery and demanding with menaces	360	255	569	428	798	655
Totals	**2,886**	**2,553**	**4,144**	**3,696**	**4,828**	**4,327**
CLASS III.—OFFENCES AGAINST PROPERTY WITHOUT VIOLENCE.						
Bringing stolen goods into Canada	3	3	2	2	2	1
Embezzlement	12	8	11	6	54	48
False pretences	1,799	1,513	2,481	2,065	2,822	2,406
Feloniously receiving stolen goods	593	383	745	520	701	539
Fraud and conspiracy to defraud	879	592	880	688	891	647
Horse, cattle and sheep stealing	76	60	123	95	87	64
Theft	10,391	8,777	12,405	10,540	13,668	11,610
Theft of mail	31	28	32	28	29	21
Theft of automobile	884	774	919	822	943	807
Totals	**14,668**	**12,138**	**17,598**	**14,766**	**19,197**	**16,143**
CLASS IV.—MALICIOUS OFFENCES AGAINST PROPERTY.						
Arson	81	34	86	51	163	86
Malicious injury to horses and cattle, and other wilful damage to property	429	347	501	381	635	482
Totals	**510**	**381**	**587**	**432**	**798**	**568**

6.—Indictable Offences, by Classes, years ended Sept. 30, 1929-31—concluded.

Class and Offence.	1929.		1930.		1931.	
	Charges.	Convictions.	Charges.	Convictions.	Charges.	Convictions.
	No.	No.	No.	No.	No.	No.
CLASS V.—FORGERY AND OTHER OFFENCES AGAINST THE CURRENCY.						
Offences against the currency	6	4	16	8	16	14
Forgery and uttering forged documents	790	720	1,092	1,001	963	885
Totals	**796**	**724**	**1,108**	**1,009**	**979**	**899**
CLASS VI.—OTHER OFFENCES NOT INCLUDED IN THE FOREGOING CLASSES.						
Breach of the Trade Marks Act	24	23	37	36	51	45
Attempt to commit suicide	136	97	203	153	182	151
Carrying unlawful weapons	157	136	163	147	180	159
Criminal negligence	177	71	200	90	190	97
Conspiracy	87	52	99	65	373	295
Indecent exposure and other offences against public morals	141	128	111	96	117	100
Intimidation	59	35	54	25	43	29
Keeping bawdy houses and inmates thereof	1,471	1,130	1,281	923	1,002	702
Offences against Gambling and Lottery Acts	1,513	1,387	1,560	1,403	2,200	2,064
Offences against Opium and Narcotic Drug Act	270[1]	220	268	217	269	229
Offences against revenue laws	257	213	234	186	228	198
Illicit stills	290	280	361	345	445	428
Perjury and subornation of perjury	110	70	148	75	167	101
Prison breach and escape from prison	211	206	174	153	206	198
Riot and affray	162	136	201	169	206	168
Sodomy and bestiality	92	71	117	101	107	81
Various other misdemeanours	45	31	85	56	97	77
Totals	**5,202**	**4,286**	**5,296**	**4,240**	**6,063**	**5,122**
Grand Totals	**29,572**	**24,097**	**34,751**	**28,457**	**38,189**	**31,542**

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[1] See also footnote to Table **10** of this chapter, p. 1021.

7.—Charges, Acquittals, Convictions and Sentences in respect of Indictable Offences, years ended Sept. 30, 1925-31.

NOTE.—Juvenile delinquencies not included in these statistics.

Item.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.	No.	No.
Charges	21,685	21,976	23,563	26,693	29,572	34,751	38,189
Acquittals[1]	4,441	4,510	4,685	4,970	5,432	6,246	6,972
Persons detained for lunacy	26	18	42	33	43	48	58
Convictions	17,219	17,448	18,836	21,720	24,097	28,457	31,542
Males	15,184	15,393	16,823	19,520	21,460	25,797	28,935
Females	2,035	2,055	2,013	2,200	2,637	2,660	2,607
First conviction	14,172	14,286	14,761	17,314	18,638	21,319	23,474
Second conviction	1,345	1,365	1,632	1,955	2,396	3,051	3,159
Reiterated conviction	1,702	1,797	2,443	2,451	3,063	4,087	4,909
Sentences—							
Option of a fine	4,712	5,469	5,606	6,719	7,050	7,473	8,036
Under one year in gaol	4,385	4,612	5,016	5,737	5,966	7,474	8,794
One year and over in gaol	1,336	1,309	1,456	1,668	1,715	2,502	2,728
Indeterminate	–	–	–	–	457	115	7
Two years and under five in penitentiary	1,244	1,198	1,370	1,622	1,781	2,501	2,551
Five years and over in penitentiary	278	351	364	362	374	508	568
For life in penitentiary	14	4	5	7	9	4	10
Death	18	15	12	19	26	17	25
Committed to reformatories	370	172	195	227	319	224	597
Other sentences	4,862	4,318	4,812	5,359	6,400	7,639	8,226

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[1] Include cases where proceedings were stayed, jury disagreed, etc.

8.—Occupations, etc., of Persons Convicted of Indictable Offences, years ended Sept. 30, 1928-31.

NOTE.—Juvenile deliquents not included.

Item.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
	No.	No.	No.	No.	No.	No.	No.
Occupation—							
Agriculture	951	919	1,014	1,320	1,509	1,509	1,780
Lumbering	63	68	112	60	98	115	117
Fishing	71	56	61	96	66	77	98
Mining	162	168	169	179	205	289	188
Manufacturing and construction	1,316	1,485	1,786	1,903	2,298	3,050	3,274
Transportation	522	735	647	673	765	940	941
Trade	1,802	2,258	2,236	2,822	2,807	3,235	3,672
Service	1,766	1,250	1,916	2,302	3,030	3,434	3,467
Professional	96	84	95	137	222	342	272
Labourers	5,425	5,161	6,058	7,070	7,653	9,974	11,409
Not given	5,045	5,264	4,742	5,158	5,444	5,492	6,324
Totals	**17,219**	**17,448**	**18,836**	**21,720**	**24,097**	**28,457**	**31,542**
Conjugal condition—							
Married	5,777	5,928	6,559	7,886	8,220	9,587	10,141
Single	8,445	7,712	9,321	10,054	11,997	15,332	15,003
Widowed	263	198	247	374	336	371	327
Divorced	–	–	–	–	2	7	5
Not given	2,734	3,610	2,709	3,406	3,542	3,160	6,066
Educational status—							
Unable to read or write	528	494	641	533	632	711	464
Elementary	13,506	13,066	15,278	17,301	19,290	23,819	26,490
Superior	201	163	215	268	479	482	420
Not given	2,984	3,725	2,702	3,618	3,696	3,445	4,168
Age—							
16 years and under 21	3,464	3,192	3,760	4,231	5,909	6,453	7,266
21 years and under 40	8,238	7,753	9,011	9,640	12,799	14,343	15,810
40 years and over	2,544	2,845	3,110	3,760	4,481	4,901	4,871
Not given	2,973	3,658	2,955	3,089	918	2,760	3,595
Use of liquors—							
Moderate	9,518	9,121	10,848	11,629	12,919	17,305	17,753
Immoderate	1,330	1,158	1,399	1,952	1,914	2,167	2,121
Not given	6,371	7,169	6,589	8,139	9,264	8,985	11,668
Birthplace—							
England and Wales	1,310	1,230	1,335	1,496	1,916	2,245	2,100
Ireland	256	231	235	300	322	433	394
Scotland	389	427	554	638	645	764	943
Canada	9,494	9,237	10,710	12,367	13,930	17,256	18,297
Other British possessions	85	81	136	72	99	163	169
United States	789	711	844	987	1,129	1,094	990
Other foreign countries	1,897	1,962	2,185	2,671	2,926	3,486	2,730
Not given	2,999	3,569	2,837	3,189	3,130	3,016	778
Religion—							
Baptist	435	262	381	509	501	710	686
Roman Catholic	5,057	5,437	5,977	6,938	7,784	9,804	10,141
Church of England	2,429	2,243	2,392	2,327	2,889	3,213	3,562
Methodist	1,100	786	889[1]	573[1]	630[1]	578[1]	571[1]
Presbyterian	1,752	1,471	1,555	1,727	2,084	2,387	2,836
United Church	–	284	530	821	1,129	1,958	2,050
Other Protestant	1,596	1,706	2,044	3,007	3,675	3,388	3,695
Jewish	354	422	433	592	470	497	618
Other denominations	899	999	1,161	1,123	1,237	2,340	807
Not given	3,597	3,838	3,474	3,894	3,698	3,582	4,590
Residence—							
Cities and towns	13,917	14,323	15,393	17,563	18,717	21,986	24,210
Rural districts	2,941	2,936	2,816	3,893	5,118	6,369	6,648
Not given	361	189	627	264	262	102	684

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[1] Notwithstanding the fact that the United Church of Canada was completely organized in 1926, these persons still reported themselves as Methodists.

Section 3.—Summary Convictions of Adults.

The following statistics relate to "non-indictable" offences committed by adults (persons 16 years of age or over) and disposed of by police magistrates or other justices of the peace, under authority of the Summary Convictions Act. Such convictions numbered 327,778 during the year ended Sept. 30, 1931, as compared with 308,759 in 1930, 290,043 in 1929, 245,763 in 1928, and 193,240 in 1927. This marked increase in the last five or six years has been due almost entirely to breaches of Traffic Regulations, which have risen from 78,027 in 1926 to 212,361 in 1931, or from 46 p.c. to nearly 65 p.c. of the total convictions. By sexes the summary convictions appear as follows: in 1926, males 159,528, females 10,385; in 1927, males 182,392, females 10,848; in 1928, males 232,554, females 13,209; in 1929, males 274,977, females 15,066; in 1930, males 292,557, females 16,202; in 1931, males 312,111, females 15,667.

Summary convictions are given by provinces from 1900 to 1931 in Table **9**, and details of these offences are given for the four latest years in Table **10**.

9.—Summary Convictions, by Provinces, years ended Sept. 30, 1900-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.[1]	Total.
1900......	402	2,270	2,174	8,430	15,650	1,423	–	–	2,505	1,877	1,154	35,885
1901......	321	2,648	2,165	7,894	16,268	2,018	–	–	2,714	1,259	1,223	36,510
1902......	311	3,459	2,220	7,941	16,892	2,049	–	–	2,990	947	1,067	37,876
1903......	400	4,462	2,278	8,268	19,112	2,682	–	–	3,086	922	2,652	43,862
1904......	421	3,819	2,624	9,662	19,783	4,890	–	–	2,869	543	3,581	48,192
1905......	331	4,234	2,480	11,733	21,634	6,789	–	–	2,874	377	4,483	54,935
1906......	212	4,763	2,560	12,511	24,046	8,471	–	–	3,386	352	6,510	62,811
1907......	222	4,659	2,821	13,283	26,520	8,671	4,729	4,077	4,766	312	–	70,060
1908......	278	4,562	2,717	16,094	29,858	7,794	4,536	5,521	5,684	244	–	77,288
1909......	277	4,348	2,449	16,491	31,423	8,279	4,375	6,181	4,415	256	9	78,503
1910......	336	5,338	2,382	16,452	36,028	9,271	6,340	8,754	6,070	215	17	91,203
1911......	375	5,306	2,766	17,729	34,871	12,366	7,317	9,350	10,380	145	28	100,633
1912......	437	5,920	3,022	24,335	42,104	13,985	9,184	15,254	16,472	163	84	130,960
1913......	443	6,353	3,136	29,714	51,396	16,513	11,711	17,513	17,882	157	–	154,818
1914......	498	6,613	2,872	30,563	56,874	14,840	11,854	16,806	20,481	196	–	161,597
1915......	346	5,774	2,833	24,152	49,942	11,266	9,650	12,331	15,993	143	–	132,430
1916......	405	5,924	2,664	20,767	41,732	7,826	9,287	9,526	6,344	156	–	104,631
1917......	323	4,700	2,564	22,560	42,655	7,065	6,007	5,726	6,768	84	–	98,452
1918......	209	4,794	1,611	25,374	46,448	7,298	6,536	6,744	6,821	64	–	105,899
1919......	236	5,533	2,447	30,881	44,587	8,128	6,180	5,961	7,638	32	–	111,623
1920......	340	5,790	3,405	40,801	55,049	11,093	6,523	7,219	13,996	49	–	144,265
1921......	373	4,639	2,680	45,042	63,874	9,563	6,137	8,571	14,460	37	–	155,376
1922......	309	3,332	2,281	31,441	63,015	9,530	6,876	7,766	11,720	52	–	136,322
1923......	321	3,033	2,179	27,563	64,639	11,377	8,346	8,359	11,639	37	–	137,493
1924......	232	3,355	2,499	22,803	73,768	11,189	7,274	8,342	13,508	29	–	142,999
1925	235	2,790	2,417	25,364	79,470	10,724	8,020	7,840	14,875	29	61	151,825
1926	345	3,568	2,418	24,428	90,061	13,913	8,614	8,142	18,337	45	42	169,913
1927......	392	4,362	2,565	28,732	101,345	16,420	8,243	8,801	22,292	54	34	193,240
1928......	662	4,499	3,031	29,302	146,586	19,921	9,108	10,927	21,598	72	57	245,763
1929......	783	6,231	4,032	51,099	153,385	26,536	11,413	13,939	22,499	94	32	290,043
1930	906	6,299	4,072	60,098	163,913	26,879	11,574	12,904	21,989	86	39	308,759
1931......	838	5,324	4,533	99,381	153,451	22,625	10,691	13,113	17,671	80	71	327,778

[1] The decline after 1906 is due to the formation of the provinces of Saskatchewan and Alberta out of parts of the Northwest Territories.

10.—Summary Convictions, by Offences, years ended Sept. 30, 1928-31.

Offence.	1928.	1929.	1930.	1931.	Increase or Decrease 1930-31.
Assault..................................	3,499	4,146	4,177	4,809	+ 632
Carrying firearms and unlawful weapons.	383	564	535	592	+ 57
Contempt of court......................	28	21	26	38	+ 12
Cruelty to animals......................	474	390	320	272	– 48
Disturbing religious and like meetings....	28	38	43	30	– 13
Fishery and Game Acts, offences against.	1,599	1,858	2,540	2,420	– 120
Gambling Acts, offences against..........	5,923	8,244	6,565	8,287	+ 1,722
Immigration Act, offences against........	40	51	58	47	– 11
Inspection and Sales Act, offences against	198	191	873	180	– 693
Adulteration of Food (Food and Drugs Acts)..................................	221	198	172	119	– 53
Weights and Measures Acts, offences against................................	87	162	176	103	– 73
Liquor, Prohibition and Temperance Acts, offences against..................	15,263	19,327	18,132	16,185	– 1,947
Malicious or wilful damage to property...	782	896	1,009	859	– 150
Masters' and Servants' Acts, offences against................................	244	321	235	327	+ 92
Non-payment of wages..................	882	1,484	1,677	1,918	+ 241
Breaches of Traffic Regulations..........	141,493	166,337	185,584	212,361	+26,777
Breaches of by-laws....................	14,564	14,171	14,625	14,351	– 274
Non-support of family and neglecting children................................	1,486	1,708	2,098	1,909	– 189

10.—Summary Convictions, by Offences, years ended Sept. 30, 1928-31—concluded.

Offence.	1928.	1929.	1930.	1931.	Increase or Decrease 1930-31.
Contributing to delinquency of children..	608	720	801	880	+ 79
Opium and Narcotic Drug Act, various offences against........................	304[1]	396[1]	242	80	− 162
Profanation of the Lord's Day...........	1,115	635	944	1,467	+ 523
Railway Acts, various offences against...	917	1,031	1,284	1,709	+ 425
Trespass on railway......................	1,062	1,283	1,332	1,287	− 45
Stealing ride on railway..................	633	944	1,638	2,137	+ 499
Revenue laws, offences against...........	1,069	1,688	1,647	557	− 1,090
Trespass..................................	604	858	989	711	− 278
Vagrancy..................................	8,502	11.648	11,161	15,301	+ 4,140
Drunkenness...............................	33,224	38,826	35,789	29,148	− 6,641
Insulting, abusive and profane language..	568	320	578	298	− 280
Frequenting bawdy houses.................	2,162	4,220	3,727	3,705	− 22
Loose, idle, disorderly conduct and disturbing the peace......................	5,490	4,697	7,510	3,999	− 3,511
Various other offences...................	2,311	2,690	2,272	2,180	− 92
Totals......................	**245,763**	**290,043**	**308,759**	**327,778**	**+19,019**

[1] Not including 302 convictions in 1928 and 220 in 1929, for selling and possessing drugs; these appear in the indictable offences.

Convictions for Drunkenness.—The number of summary convictions for drunkenness in Canada in 1931 was 29,148 as compared with 35,789 in 1930, 38,826 in 1929, 33,224 in 1928 and 31,171 in 1927, a decrease of 6,641 in 1931 from the figures of 1930. Maximum figures were attained in the years 1913 and 1914; during the War there was an appreciable reduction and since the War, while figures have fluctuated, they have not approximated former high levels. The decline in the last two years would appear to be at least partly due to the depression. Table **11** shows the number of convictions by provinces and years from 1900 to 1931.

11.—Convictions for Drunkenness, by Provinces, years ended Sept. 30, 1900-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.[1]	Total.
1900......	327	1,255	1,288	3,209	3,370	776	–	–	1,227	341	422	12,215
1901......	241	1,387	1,299	2,973	3,900	834	–	–	1,232	370	491	12,727
1902	230	2,012	1,403	2,783	3,944	1,003	–	–	1,192	371	386	13,324
1903......	274	2,726	1,458	2,931	5,043	1,466	–	–	1,356	337	941	16,532
1904	288	2,344	1,676	3,986	5,465	2,505	–	–	1,288	242	1,101	18,895
1905......	172	2,529	1,734	4,781	6,047	3,544	–	–	1,284	185	1,345	21,621
1906......	120	2,919	1,843	4,802	7,459	3,905	–	–	1,697	111	2,254	25,110
1907......	144	2,975	2,018	5,503	8,959	4,602	1,741	1,459	2,293	108	–	29,802
1908......	184	2,800	1,881	6,843	9,417	3,639	1,318	1,990	2,900	117	–	31,089
1909......	160	2,689	1,694	6,956	10,035	3,590	1,334	2,214	2,314	117	2	31,105
1910......	183	3,131	1,562	5,557	10,717	4,289	1,885	3,543	3,085	115	1	34,068
1911......	238	3,149	1,944	6,805	11,347	5,832	2,359	4,041	5,594	63	7	41,379
1912	309	3,693	2,116	9,863	12,785	6,925	2,462	6,657	8,275	72	14	53,171
1913......	324	3,955	2,073	12,265	16,236	7,493	2,970	7,283	8,316	60	–	60,975
1914......	342	3,999	1,765	12,776	17,703	6,193	2,142	5,710	9,376	61	–	60,067
1915......	231	3,436	1,694	8,939	12,553	4,154	1,332	2,802	5,960	60	–	41,161
1916......	219	3,614	1,696	7,108	11,728	3,114	1,062	1,809	2,327	53	–	32.730
1917......	207	2,546	1,516	8,025	10,945	1,085	770	391	2,372	25	–	27,882
1918......	96	2,435	704	6,680	7,932	1,123	434	825	778	19	–	21,026
1919......	116	2,879	1,350	7,116	8,498	1,570	618	1,057	1,004	9	–	24,217
1920......	120	3,140	1,882	11,863	15,021	2,330	919	1,536	2,948	10	–	39,769
1921......	144	2,156	1,264	9,944	14,498	1,429	708	1,838	2,379	2	–	34,362
1922......	162	1,492	1,088	7,103	10,063	1,623	816	1,608	1,081	12	–	25,048
1923......	164	1,392	1,074	6,260	11,370	1,680	884	1,277	1,443	21	–	25,565
1924......	94	1,456	1,176	6,146	12,993	1,948	505	1,464	1,545	11	–	27,338
1925......	112	1,466	1,171	6,342	11,811	1,948	668	1,374	1,844	9	6	26,751
1926......	168	1,898	1,234	5,364	13,752	1,871	487	1,413	2,114	6	10	28,317
1927......	182	2,053	1,397	7,000	14,334	1,889	618	1,182	2,496	26	–	31,171
1928......	263	2,176	1,285	6,362	15,931	1,863	1,014	1,538	2,758	34	–	33,224
1929......	400	3,284	1,814	8,328	17,620	1,830	794	1,810	2,898	42	–	38,826
1930......	393	3,236	1,706	7,649	15,970	1,392	674	1,551	3,183	35	–	35,789
1931......	446	2,137	1,541	7,461	12,404	1,089	466	1,191	2,372	41	–	29,148

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[1] The decline after 1906 is due to the formation of the provinces of Saskatchewan and Alberta out of parts of the Northwest Territories.

Offences against the Liquor Acts.—Until the Great War, alcoholic liquors were generally sold under specified conditions by licensed hotels or licensed shops. Offences against the Liquor Acts usually represented a breach of the conditions of sale. During the War, prohibition was generally established but in more recent years the tendency has been for the Provincial Governments to take over the sale of liquor, to manage this sale through commissions and derive a revenue therefrom. Eight of the nine provinces now have their liquor commissions, Prince Edward Island being the only province in which prohibition prevails. In these circumstances, the convictions for offences against the Liquor Acts in 1929 reached the highest figure on record, *viz.*, 19,327, but fell off by more than three thousand convictions, to 16,185, in 1931. The number of such convictions in each year since 1900 is given by provinces in Table **12.**

12.—Convictions for Offences against the Liquor Acts, by Provinces, years ended Sept. 30, 1900-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.[1]	Total.
1900......	9	153	301	458	749	34	–	–	115	25	98	1,942
1901......	17	167	329	457	820	60	–	–	156	83	141	2,230
1902......	38	207	302	600	784	50	–	–	261	37	87	2,366
1903......	50	422	294	660	1,051	76	–	–	169	72	237	3,031
1904......	59	371	375	583	1,028	122	–	–	133	47	300	3,018
1905......	74	446	327	858	861	85	–	–	254	45	325	3,275
1906......	37	540	309	858	877	51	–	–	240	21	314	3,247
1907......	23	490	395	706	1,016	33	219	193	382	41	–	3,498
1908......	43	384	372	864	1,140	75	121	267	274	39	–	3,579
1909......	38	410	353	710	1,644	41	164	250	348	35	6	3,999
1910......	40	494	367	893	1,701	46	248	396	436	30	14	4,665
1911......	38	592	278	1,032	1,759	46	240	423	318	33	16	4,775
1912......	36	551	361	859	2,117	85	366	605	625	40	26	5,671
1913......	26	502	447	791	2,167	166	528	560	741	41	–	5,969
1914......	72	660	365	882	2,328	166	404	551	394	49	–	5,871
1915......	42	633	390	1,021	2,018	124	378	573	246	27	–	5,452
1916......	75	646	352	1,015	2,002	172	967	713	295	11	–	6,248
1917......	36	449	314	1,076	2,927	289	774	885	576	15	–	7,339
1918......	42	412	288	1,155	3,410	230	422	678	812	23	–	7,472
1919......	37	479	387	1,479	3,353	175	434	436	597	6	–	7,383
1920......	23	394	585	1,975	4,385	380	452	618	1,427	8	–	10,247
1921......	44	362	419	1,384	4,938	427	583	907	1,394	2	–	10,460
1922......	28	267	366	954	3,246	392	708	1,043	1,503	12	–	8,519
1923......	39	264	364	1,724	3,958	542	997	990	1,196	14	–	10,088
1924......	29	293	375	1,549	4,678	452	966	817	1,286	4	–	10,449
1925......	51	235	319	1,919	5,047	512	1,078	758	1,699	9	9	11,636
1926......	53	499	393	2,104	6,362	786	1,231	737	1,345	2	–	13,512
1927......	66	610	271	2,025	5,620	627	1,245	814	1,186	13	–	12,477
1928......	69	688	478	2,096	7,812	598	1,174	944	1,350	22	32	15,263
1929......	81	804	486	3,392	9,034	1,399	1,542	1,017	1,556	8	8	19,327
1930......	98	532	469	3,043	8,995	1,180	1,392	970	1,432	14	7	18,132
1931......	52	588	541	2,956	8,044	1,144	1,042	888	907	13	10	16,185

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[1] The decline after 1906 is due to the formation of the provinces of Saskatchewan and Alberta out of parts of the Northwest Territories.

Breaches of Traffic Regulations.—Convictions for breaches of Traffic Regulations, which at the beginning of the century numbered only 185 in all Canada (Table **13**), have, as a result of the advent of the motor vehicle, become the largest element in the non-indictable offences, numbering 212,361 out of a total of 327,778 in 1931, or nearly 65 p.c. of the total.

13.—Convictions for Breaches of Traffic Regulations, by Provinces, years ended Sept. 30, 1900-31.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.[1]	Total.
1900......	2	21	7	31	94	5	–	–	17	–	8	185
1901......	3	12	2	5	128	22	–	–	9	–	4	185
1902.....	6	38	9	5	278	24	–	–	6	17	4	387
1903......	1	47	22	40	314	53	–	–	43	8	12	540
1904......	1	25	14	10	431	142	–	–	68	–	13	704
1905......	18	47	9	40	431	360	–	–	53	2	97	1,057
1906......	–	16	10	226	190	603	–	–	91	–	40	1,176
1907......	–	27	7	53	239	290	21	28	135	–	–	800
1908......	2	17	13	55	509	176	18	27	453	–	–	1,270
1909......	11	19	5	64	1,929	469	25	21	283	–	–	2,826
1910......	15	38	10	131	3,515	1,161	28	137	436	–	–	5,471
1911......	19	86	17	267	3,376	1,116	96	139	661	–	–	5,777
1912......	8	97	24	1,806	5,928	1,778	215	838	1,768	–	–	12,462
1913......	9	83	5	3,373	6,697	3,030	248	672	1,883	–	–	16,000
1914.....	7	176	69	2,643	4,717	2,419	410	754	2,051	–	–	13,246
1915	6	62	101	1,509	4,494	1,865	204	503	1,804	1	–	10,549
1916......	7	228	57	2,146	5,577	1,043	321	380	615	7	–	10,381
1917......	13	324	54	1,677	9,854	2,619	441	533	813	10	–	16,338
1918......	17	523	80	3,505	12,206	2,700	418	736	995	1	–	21,181
1919......	15	509	62	4,971	13,374	3,123	863	701	1,677	1	–	25,296
1920	129	600	49	11,499	19,708	4,987	744	1,673	3,780	1	–	43.170
1921......	109	443	87	12,335	26,860	4,995	700	1,845	4,412	2	–	51,788
1922......	38	289	315	3,344	31,813	4,968	1,112	1,996	4,101	1	–	47,977
1923......	36	397	196	1,746	33,402	6,182	1,246	2,514	4,095	1	–	49,815
1924......	49	350	237	3,818	40,530	6,412	1,282	2,301	5,084	–	–	60,063
1925......	27	200	281	4,976	44,618	5,971	1,375	1,940	4,389	1	–	63,777
1926......	64	263	180	5,534	52,727	8,588	1,730	2,059	6,882	–	–	78,027
1927......	69	402	244	6,418	62,037	10,871	1,610	2,459	12,268	2	–	96,380
1928......	228	462	516	6,273	101,356	14,099	2,100	3,481	12,976	2	–	141,493
1929......	152	863	887	19,427	105,703	19,460	3,643	5,612	10,592	2	1	166,337
1930......	212	831	757	28,633	115,073	20,672	3,727	4,903	10,776	–	–	185,584
1931......	95	999	1,200	64,611	111,718	16,556	4,259	5,070	7,851	2	–	212,361

[1] The decline after 1906 is due to the formation of the provinces of Saskatchewan and Alberta out of parts of the Northwest Territories.

The greatest percentage increases were recorded between 1908 and 1913. In this 5-year period total convictions increased from 1,270 to 16,000. For three years thereafter there was an abrupt decline, but beginning with 1917 another 5-year series of increases brought the total up to 51,788 in 1921; by 1924 the 60,000 mark had been reached, and recent years have witnessed a rapid increase to the 1931 figures. The provincial distribution of the totals indicates that for the last five years Quebec shows the largest percentage of increase. Only Quebec and New Brunswick show increases for 1931 as compared with 1930 but the single increase in the case of Quebec is more than sufficient to offset the decreases of the other seven provinces, substantial though these are in some cases, such as Ontario, Manitoba and British Columbia. For the year 1931, Ontario, which had 47 p.c. of the registrations of motor vehicles in Canada (see p. 686), had nearly 53 p.c. of the total convictions; Quebec in the same year had 15 p.c. of the motor vehicles and 30 p.c. of the convictions. In interpreting the figures in this way, however, it should be pointed out that Traffic Regulations are by no means uniform throughout Canada and no account is taken of the differences in the degrees of urbanization in the two provinces.

Section 4.—Juvenile Delinquency.

Juveniles under 16 years of age to the number of 7,768 were found guilty of various offences in the year ended Sept. 30, 1931, as compared with 8,425 in 1930, 7,826 in 1929, 7,699 in 1928, 8,185 in 1927 and 7,831 in 1926, a decrease of 657 in the latest year. Of the 1931 total, 5,311 were convicted of "major" offences and 2,457 of "minor" offences, terms which correspond very nearly to "indictable" and "non-indictable" offences, as applied to adults. Convictions for "major" offences numbered 5,653 in 1930 and convictions for "minor" offences 2,772. The offences proven against juveniles in 1930 and 1931 are shown by provinces in Table **14** and by chief major offences committed for the years 1925-31 in Table **15.**

14.—Juvenile Delinquents Convicted of Major and Minor Offences, by Provinces and Sex, 1930 and 1931.

Province.	Major Offences.				Minor Offences.			
	Males.		Females.		Males.		Females.	
	1930.	1931.	1930.	1931.	1930.	1931.	1930.	1931.
Prince Edward Island	8	14	2	–	–	1	–	–
Nova Scotia	192	152	11	3	109	50	13	12
New Brunswick	123	155	8	11	149	185	21	35
Quebec	993	1,178	40	82	434	435	114	128
Ontario	2,068	1,657	87	101	859	784	94	76
Manitoba	818	826	51	59	463	349	57	41
Saskatchewan	367	276	14	21	70	51	6	5
Alberta	435	422	8	8	203	155	5	4
British Columbia	408	327	20	19	170	136	5	10
Canada	**5,412**	**5,007**	**241**	**304**	**2,457**	**2,146**	**315**	**311**

Major Offences.—In Table **15** are shown the various major offences for which juvenile deliquents were convicted in 1925 to 1931. It will be observed that theft, house- and shop-breaking with theft, and other wilful damage to property account for the great bulk of the offences; in 1931, 91 p.c. of the major offences were of this character.

15.—Juvenile Delinquents Convicted of Major Offences, by Offences, 1925-31.

Offence.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	Increase or Decrease in 1931.
Manslaughter	–	2	–	–	1	–	1	+ 1
Rape, carnal knowledge and incest	–	8	5	13	10	5	8	+ 3
Indecent assault	37	22	28	43	25	49	42	− 7
Aggravated assault and wounding	11	16	14	24	48	10	52	+42
Common assault	114	109	99	67	93	101	119	+18
Endangering life on railway	40	60	28	35	43	31	32	+ 1
Other offences against the person	5	3	5	2	3	3	2	− 1
Breaking, entering and theft	677	653	770	818	972	944	948	+ 4
Robbery	17	6	2	6	4	7	13	+ 6
Theft and receiving stolen goods	3,275	3,462	3,289	3,255	3,081	3,662	3,139	−523
False pretences and fraud	12	8	22	10	15	24	11	−13
Arson	12	30	5	17	11	31	39	+ 8
Other wilful damage to property	581	553	793	620	679	702	749	+47
Forgery and offences against currency	7	14	7	13	12	17	10	− 7
Immorality	144	114	68	96	63	52	109	+57
Various other offences	48	30	21	44	46	15	37	+22
Totals	**4,980**	**5,090**	**5,156**	**5,063**	**5,106**	**5,653**	**5,311**	**−342**

Minor Offences.—Of the 2,457 juvenile deliquents found guilty of minor offences in 1931, 598 were convicted of breaches of municipal by-laws, 430 of disorderly conduct and disturbing the peace, 288 of disobedience and incorrigibility, 297 of trespass, 329 of truancy, 264 of vagrancy and indecent conduct and 251 of other minor offences.

Section 5.—Police Statistics.

In 1931, 150 cities and towns, with populations of 4,000 or over, supplied police statistics to the Dominion Bureau of Statistics. These cities and towns, with an aggregate population of 4,343,457, had 5,321 policemen, who made 285,281 arrests and summonses. The total number of offences committed during the year and made known to the police was 378,226, and the number of prosecutions was 286,896 or 75·8 p.c. of the known offences. Convictions secured in respect of these offences numbered 235,526, being 62·3 p.c. of the known offences and 82·1 p.c. of the prosecutions.

The number of automobiles reported stolen was 11,207, of which 10,757 were recovered. Of 10,468 bicycles stolen, 6,245 were recovered. The value of other lost articles reported to the police was $2,466,415, of which 52·7 p.c. was recovered.

16.—Police Statistics of Canadian Cities and Towns, by Provinces, year ended Sept. 30, 1931.

Province.	Number of— Cities and Towns.	Number of— Population.	Number of— Police.	Number of— Arrests.	Number of— Summonses.	Number of the Population to each Policeman.	Number of Arrests per Policeman.
Prince Edward Island	1	10,814	10	570	215	1,081	57
Nova Scotia	14	181,491	145	5,921	1,411	1,252	41
New Brunswick	5	87,480	86	2,939	1,624	1,017	34
Quebec	34	1,380,364	2,082	45,134	18,453	663	21
Ontario	66	1,729,472	1,876	35,978	111,486	924	19
Manitoba	7	272,973	321	7,065	20,744	850	22
Saskatchewan	8	142,911	143	3,203	3,380	999	22
Alberta	4	186,747	200	5,933	6,362	934	29
British Columbia	11	351,205	458	10,234	4,629	772	22
Canada	**150**	**4,343,457**	**5,321**	**116,977**	**168,304**	**816**	**22**

Section 6.—Penitentiary Statistics.

The Penitentiaries Branch of the Department of Justice is charged with the administration of the various penitentiaries of Canada. Seven institutions are included in the system, the two largest of which are at Portsmouth, Ont., and St. Vincent de Paul, Que., while the other five are at Dorchester, N.B.; Prince Albert, Sask.; Stony Mountain, Man.; New Westminster, B.C. and Collins Bay, Ont. During the fiscal year ended Mar. 31, 1932, the average daily population of these institutions was 3,931 and the total net expenditure for the year was $2,554,556, compared with 3,434 average daily population and $3,034,438 total net expenditure for the year 1931.

Female convicts numbered 27 on Mar. 31, 1925, but had increased to 40 on Mar. 31, 1928 and were 32 on Mar. 31, 1929, 38 on Mar. 31, 1930, 44 on Mar. 31, 1931, and 48 on Mar. 31, 1932. They are all kept in the penitentiary at Portsmouth, a suburb of Kingston, where a special wing and staff are maintained for their detention and supervision. A new building to be used for this purpose is under construction.

Tables **18** to **20** give the more important penitentiary statistics as reported by the Superintendent. An increase of 450 is shown in the number of those in custody on Mar. 31, 1932, as compared with the same date in the previous year. The number of paroles, as shown in Table **18** for 1932, is a decrease of 34 compared with the previous year. It has fluctuated considerably between the 566 mark in 1924 and the figure of 379 set for 1932. Table **19**, showing the ages of convicts by groups, indicates that since 1925, when the total number in custody reached 2,345, there has been a decrease in the average age of those in custody. In the last five years, the convicts under 30 increased from 1,317 to 2,435 or by 1,118, while the total number in custody increased by 1,684; so that convicts under 30 showed both an actual and a proportional increase. Detailed statistics of nationality, religion, conjugal state and racial origin of convicts are presented in Table **20**.

Movement of Population of Penal Institutions.—Penal institutions may be classified under four heads: penitentiaries, with slow turnover, since prisoners have long sentences; reformatories for boys and reformatories for girls, also with rather slow turnovers, but more rapid in the case of boys than in that of girls; and lastly common gaols, where the turnover is extremely rapid. If the average population for the year be the average of the inmates at the beginning and end of the year, and the number discharged be the turnover, the turnover in 1931 was: in penitentiaries, 43 p.c.; in reformatories for boys, 314 p.c.; in reformatories for girls, 99 p.c.; in gaols, no less than 1,379 p.c. Thus the average time spent in gaol was about four weeks. In dealing with these figures it must be borne in mind that common gaol population changes from day to day and is partly made up of accused persons awaiting trial who may be liberated to-day or sent to a penitentiary or reformatory to-morrow.

17.—Population of Penal Institutions, 1929-31.

Note.—Penitentiary statistics until 1919 were supplied directly by each penitentiary and were for the calendar year. For 1920 and subsequent years they have been supplied by the Superintendent of Penitentiaries and are for the fiscal year ended Mar. 31. For other institutions, the figures are as at Sept. 30.

Penal Institutions.	In Custody, beginning of year.	Admitted during year.	Discharged during year.	In Custody, end of year.
1929.				
Penitentiaries	2,560	1,383	1,174	2,769
Reformatories for boys	2,435	7,615	7,328	2,722
Reformatories for girls	437	465	494	408
Gaols	3,129	57,165	56,715	3,579
Totals	**8,561**	**66,628**	**65,711**	**9,478**
1930.				
Penitentiaries	2,769	1,648	1,230	3,187
Reformatories for boys	2,846[1]	9,728[1]	9,469[1]	3,105[1]
Reformatories for girls	602[2]	543[2]	497[2]	648[2]
Gaols	3,579	63,672	62,968	4,283
Totals	**9,796**[3]	**75,591**[3]	**74,164**[3]	**11,223**[3]
1931.				
Penitentiaries	3,187	1,899	1,372	3,714
Reformatories for boys	3,105[1]	10,014[1]	9,737[1]	3,180[1]
Reformatories for girls	648[2]	684[2]	644[2]	932[2]
Gaols	4,283	59,358	59,065	4,467
Totals	**11,223**[3]	**71,955**[3]	**70,818**[3]	**12,293**[3]

[1] St. John's Industrial School, Toronto, added in 1930. [2] Alexander Industrial School, Toronto, added in 1930. [3] See footnotes 1 and 2.

18.—Movement of Convicts, fiscal years ended Mar. 31, 1925-32.

Schedule.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.	No.
In custody, beginning of fiscal year.	2,225	2,345	2.473	2,480	2,560	2,769	3,187	3,714
Received by—								
Forfeiture of parole	9	7	5	7	6	1	8	8
Revoked paroles	16	16	20	15	14	23	19	–
Recapture	1	1	3	–	–	1	1	3
Transfer	14	94	15	9	110	187	172	145
Received from gaols, etc	928	1,014[1, 6]	1,003	1,171[4]	1,253[4]	1,436	1,699	1,787
Totals	**3,193**	**3,477**	**3,519**	**3,682**	**3,943**	**4,417**	**5,086**	**5,657**
Discharged by—								
Death	14	17[5]	13[6]	16[5]	16	14	12	16
Escape	–	6[4]	3	1[2]	2[3]	1	1	3
Expiry of sentence	342	473	535	647	577	559	654	837
Order of the Court	11	8	3	2	1	2	1	–
Pardon	12	9	7	11	10	15	26	19
Parole	366	300	377	363	384	363	413	379
Transfer	11	94	15	9	110	187	170	150
Deportation	82	92	80	70	61	77	89	83
Transfer to provincial gaol and execution	–	–	–	–	–	2	–	–
Return to provincial authorities	10	5	6	3	13	10	6	6
In Custody, end of fiscal year	**2,345**	**2,473**	**2,480**	**2,560**	**2,769**	**3,187**	**3,714**	**4,164**

[1] One from mental hospital. [2] From asylum. [3] One from asylum. [4] From provincial institutions: 5 in 1926, 2 in 1928 and 2 in 1929. [5] Includes 1 suicide. [6] While on temporary ticket-of-leave, 2.

19.—Ages of Convicts, as at Mar. 31, 1925-32.

Age Group.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.	No.
Under 20 years	240	257	281	338	322	377	484	527
From 20 to under 30 years	1,061	1,087	1,036	1,137	1,274	1,460	1,710	1,908
From 30 to under 40 years	591	635	634	587	629	738	842	970
From 40 to under 50 years	292	321	364	336	357	395	437	487
From 50 to under 60 years	116	126	120	122	141	144	173	196
Over 60 years	45	47	45	40	46	73	68	76
Totals	**2,345**	**2,473**	**2,480**	**2,560**	**2,769**	**3,187**	**3,714**	**4,164**

20.—Convicts in Penitentiaries, Classified by Race, Nationality, Religion, etc., as at Mar. 31, 1925-32.

Item.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.	No.
By Race—								
African	54	48	42	43	60	60[1]	75[1]	79[1]
Caucasian	2,198	2,327	2,354	2,409	2,589	2,995	3,499	3,923
Indian	50	54	43	50	49	52	59	81
Mongolian	40	44	41	58	71	80	81	81
East Indian	1	–	–	–	–	–	–	–

For footnote see end of table, p. 1028.

20.—Convicts in Penitentiaries, Classified by Race, Nationality, Religion, etc., as at Mar. 31, 1925-32—concluded.

Item.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
	No.	No.	No.	No.	No.	No.	No.	No.
By Nationality (Place of Birth)—								
British—								
Canadian	1,404	1,508	1,540	1,589	1,747	2,056	2,441	2,806
English and Welsh	170	183	177	197	209	240	292	309
Irish	35	31	40	35	49	31	42	46
Scottish	59	62	61	59	74	95	118	118
Other British	25	24	29	28	36	33	30	41
Foreign—								
Austrian or Hungarian	99	107	94	67	78	94	92	90
Chinese	37	36	37	53	62	74	75	72
Italian	58	65	77	75	66	60	64	74
Russian	97	91	76	85	75	119	95	102
United States	207	206	209	220	223	253	274	307
Other foreign	154	160	140	120	156	132	191	199
By Conjugal State—								
Single	1,411	1,485	1,534	1,597	1,680	1,967	2,328	2,636
Married	823	871	827	849	965	1,088	1,240	1,352
Widowed	110	116	115	110	121	123	139	161
Divorced	1	1	4	4	3	9	7	15
By Sex—								
Male	2,318	2,439	2,441	2,520	2,729	3,149	3,670	4,116
Female	27	34	39	40	32	38	44	48
By Social Habits—								
Abstainers	507	540	475	446	425	611	872	1,076
Temperate	1,374	1,549	1,491	1,611	1,840	2,033	2,338	2,639
Intemperate	464	384	514	503	504	543	504	449
By religion—								
Anglican	370	392	381	409	480	546	618	678
Baptist	92	118	105	129	144	158	169	173
Buddhist	28	31	14	39	55	62	68	61
Greek Catholic	56	65	61	43	49	54	69	54
Jewish	51	53	44	37	53	62	66	89
Lutheran	51	65	58	58	62	74	83	97
Methodist	213	224	192	–	–	–	–	–
Presbyterian	285	269	269	272	284	318	407	458
Roman Catholic	1,130	1,201	1,281	1,272	1,337	1,561	1,810	2,070
United Church	–	–	3	233	233	273	329	353[3]
Other creeds	64	47	57	68	72	79	68	131
No creed	5	8	15	–	–	–	–	–
Totals	**2,345**[2]	**2,473**	**2,480**	**2,560**	**2,769**	**3,187**	**3,714**	**4,164**

[1] All "coloured".

[2] Includes 2 Eskimos.

[3] Includes 96 persons returned as "Methodist".

CHAPTER XXVIII.—MISCELLANEOUS ADMINISTRATION.

Section 1.—Public Lands.

Table **1**, pp. 1032-1033 summarizes the character and disposition of the land area of Canada. Since there are still large areas which have been little explored and a much larger area not surveyed, and therefore not classified with regard to its possibilities, many of the figures given are estimates, although every care has been taken to consult the most competent authorities, Dominion and provincial, in a position to make such estimates. The continued extension of exploration and surveys will enable the governmental authorities to classify more exactly the lands within their jurisdiction.

In this table the areas of occupied and abandoned farms and of farm woodlots are taken from the 1931 census. The totals of the land area of the provinces and territories are the areas as revised by the Topographical Survey, Dominion Department of the Interior, and agree with those appearing in the table on p. 7 of this volume, while the areas of Indian reserves are those reported by the Department of Indian Affairs. For other items, figures supplied by the provinces have been used wherever available; otherwise estimates from Dominion Government sources, chiefly the Forest Service, have been substituted. Between the totals of existing and potential agricultural lands (item 10) and the totals of forest lands (item 18) there is, of course, duplication to the extent of the agricultural lands under forest (item 7). In view of the various sources from which the information is drawn there is satisfactory agreement in the relationship of the items.

Subsection 1.—Dominion Public Lands.

As stated on p. 1019 of the 1931 Year Book, the lands and natural resources lying within the boundaries of the provinces of Manitoba, Saskatchewan, Alberta and British Columbia, which had formerly been administered by the Dominion Government, were transferred to the administration of the provinces concerned at various dates in 1930.

Actual Dominion lands, therefore, now comprise the Northwest Territories, including the Arctic islands and the islands in Hudson bay; Yukon; the National Park areas, Indian reserves, and historic sites in the different provinces throughout Canada; certain small and widely scattered parcels of Ordnance and Admiralty lands which have been held by the Dominion Government since Confederation and are rented, disposed of, or otherwise administered with a view to bringing as many properties as possible to a state of revenue production; and, finally, public lands, at one time alienated, but which have been re-vested in the Crown in the right of the Dominion for various reasons, and upon which public monies have been spent.

The great bulk of the land areas under Dominion administration are those of Yukon and the Northwest Territories, amounting to about 936,680,000 acres or 42 p.c. of the land surface of Canada. The southern border of both Yukon and the Northwest Territories is 60° N. latitude. In Europe, Oslo, Stockholm and Leningrad are near this line, while about three-fourths of Norway, two-thirds of Sweden, all of Finland and a large proportion of Russia are north of it. In Table **1** a distinction has been made between those Dominion lands which are still freely disposable by the Dominion Government, and those which have been set aside as National Parks, under the National Parks Acts, or as Indian reserves, by Treaty. Only those which are freely disposable at the present time are classified as Dominion Crown lands, but the total Dominion lands can be easily obtained by adding the other items thereto.

Interest in this northern part of the national domain has increased in the past decade and the administration of these lands was placed under a separate branch of the Dominion Government, the North West Territories and Yukon Branch of the Department of the Interior, until 1931, when, on the transfer of the natural resources of Manitoba, Saskatchewan, Alberta and of the Railway Belt and Peace River Block of British Columbia to the respective provincial administrations, it was transferred to the Dominion Lands Administration. The Royal Canadian Mounted Police maintain law and order throughout the Northwest Territories and Yukon. More detailed particulars of the administration of each territory follow:—

The Northwest Territories.—The government of the Northwest Territories is vested in a Commissioner, a Deputy Commissioner, and a Council of five members with Ottawa as the seat of Government. The administration is carried on by the Department of the Interior through the Dominion Lands Administration. The Territories are subdivided for administrative purposes into the provisional districts of Mackenzie, Keewatin and Franklin. The district of Mackenzie is, as yet, the most widely known and developed, trading posts and settlements being located all along the great stretch of inland waterways known as the Mackenzie system. Fort Smith, the headquarters of the Mackenzie district, is located on the Slave river north of the rapids. From this point there is uninterrupted navigation to the Arctic ocean, a distance of approximately 1,369 miles.

The Administration has provided for a government hospital and medical service, grants to the Anglican and Roman Catholic churches for education, an excellent mail service in which river steamboats and aeroplanes co-operate, motor roads and a system of radio stations linking up Fort Smith, Resolution, Simpson and Aklavik with Edmonton, Alberta, and with Dawson and Mayo, Yukon.

The Department of the Interior has set aside certain areas, totalling over 338,916,000 acres, as preserves wherein only the Indian and the Eskimo may hunt. Officers in the field have made investigations into the conditions affecting musk-ox, caribou, and other forms of wild life. The Wood-Buffalo Park in the vicinity of Fort Smith covers an area of 17,300 sq. miles; it has been specially preserved for the protection of the buffalo. The Thelon Game Sanctuary to the east of Great Slave lake is, in its turn, the home of musk-oxen and caribou.

Included in the Northwest Territories are the Arctic prairies, which are capable of supplying pasturage to large numbers of reindeer and caribou. Following investigations, steps have been taken to establish a Government herd of reindeer in a suitable location on the lower Mackenzie. Indications are that this experiment will result in a plentiful meat supply in the future.

Another feature of administration has been the installation of a chain of wireless stations. This has been a great boon to the isolated posts of the Mackenzie district, as the traders and trappers are now able to keep in constant touch with outside markets, a condition enabling them to dispose of their catch to the greatest advantage. In addition to supplying market news, the radio keeps the inhabitants of the North in contact with some of the amenities of civilization.

Exploratory work has been pushed forward throughout the Territories and local surveys made in the Mackenzie and Franklin districts. Mining prospectors are following in the tracks of the explorers and the aeroplane has been used as the means of transportation to the field of operations. Drilling operations near Norman on the Mackenzie river resulted a few years ago in striking a considerable flow of oil. Exploitation of this resource awaits only the further general development of the area. The Laurentian Shield, which has proved so rich in valuable minerals in Eastern Canada, is continued into the eastern half of the Territories—that portion lying between Great Slave and Great Bear lakes and Hudson bay—and, although little exploration has been carried out to date, valuable mineral finds have been made. The rich native silver and high-grade pitchblende ores which have been lately discovered and are now under active development in the mineral region of Great Bear lake exemplify the possibilities of this vast area. The agricultural land of the Territories lies almost entirely in the extension of the central plain defined by the Mackenzie valley.

It is known that there are many possible water-power sites throughout the Territories; these will no doubt be developed as a consequence of mining enterprises. Much of the upper Mackenzie valley carries a forest cover, which furnishes timber and fuel for local needs. Fishing, agriculture, mining and lumbering are engaged in to some extent, but the principal industry of the Territories is still the taking and export of furs. Many trading posts operate throughout the regions tributary to the Arctic coast, Hudson bay, and the great inland systems of waterways.

Yukon.—Yukon Territory is administered by the Dominion Lands Administration of the Department of the Interior as in the case of the Northwest Territories. The Gold Commissioner, resident at Dawson, is the executive head of a local elective government of three members termed the Yukon Council, with jurisdiction over local matters. The Gold Commissioner acts on instructions from the Governor in Council or the Minister of the Interior. Hospitals, schools, motor roads, and other amenities of modern life have been provided and, in addition to the overland telegraph line, wireless stations at Dawson and Mayo link up with the outside world through the Northwest Territories and Edmonton.

The route ordinarily taken to enter Yukon is from Skagway, Alaska, on the south, thence by the White Pass and Yukon Railway to Whitehorse, and by river boat to Dawson.

Confederation had been consummated for thirty years before Yukon came into meteoric prominence as one of the great mineral areas of the world. This prominence was due to the discovery of the Klondike placer gold fields, the development of which reached its peak in the decade 1897-1906.

Yukon has produced over $200,000,000 worth of gold since the Klondike rush, but the old placer claims, operated with cradle, pick and shovel, have given place to consolidated holdings worked with hydraulic dredges and other modern machinery. Silver, lead, copper, tungsten and coal are known to exist in paying quantities, and of late years the development of the silver-lead ores of the Mayo district has been one of the major factors in the growth of lode-mining enterprises. There is a hydro-electric installation of 13,200 h.p. in Yukon, but this is only a small proportion of the possible installation which will be developed as required.

Although fishing, agriculture (including fur-farming), and some lumbering are carried on as auxiliary industries, the future of Yukon is inevitably bound up with mining development.

(Areas in thousands of acres.)

No.	Description of Land Areas.	P.E.I.	N.S.	N.B.	Que.	Ont.
	Classification by Type of Land—					
	Existing and Potential Agricultural Lands—					
	Alienated, Patented, Granted, etc.—					
1	Occupied farm lands[1]	1,191	4,302	4,152	17,445	22,841
	Farm land under crop[1]	495	575	958	6,080	9,306
	Improved farm land[1]	766	845	1,330	8,761	13,293
2	Abandoned farms[1]	28	323	180	333	574
3	Road allowances[6]	37	139	130	533	702
4	Totals, Alienated, Patented, Granted, etc.[7]	1,256	4,764	4,462	18,311	24,117
	Agricultural Land under Forest—					
5	Farm woodlots[5]	339	2,503	2,433	6,085	4,484
6	Unoccupied[2]	Nil	1,765	6,256	14,460	16,640
7	Totals, Agricultural Land under Forest	339	4,268	8,689	20,545	21,124
8	Dominion Crown Lands[11] suitable for Agriculture	Nil	2	[15]	3	8
9	Provincial Crown Lands suitable for Agriculture other than any already included in Item 6[16]	Nil	161	–	10,971	25,072
	Grazing Leases (included in Item 9)	Nil	[15]	[15]	[15]	67[8]
10	**Totals, Agricultural Lands[3]**	**1,258**	**8,092**	**10,718**	**43,745**	**65,837**
	Existing and Potential Forest Lands—					
	Alienated, Granted, etc.—					
11	Timber lands alienated[2]	140	2,880	3,830	7,763	5,100
12	Farm woodlots[5]	339	2,503	2,433	6,085	4,484
13	Totals Alienated, Granted, etc	479	5,383	6,263	13,848	9,584
14	Under lease, licence to cut, timber berths, pulp concessions, etc. (included in Item 16)	Nil	882[8]	6,808[8]	51,059[8]	47,205[8]
15	Dominion Lands under forest	Nil	–	–	6	72
16	Indian Reserves under forest[4]	1	16	36	163	873
17	Provincial Lands under forest	Nil	2,281	7,506	225,123	109,500
18	**Totals, Forest Lands[17]**	**464**	**7,680**	**15,805**	**239,040**	**120,033**
19	**Waste Lands[12]**	**Nil**	**1,800**	[20]	**72,822**	**67,767**
	Summary Classification by Tenure—					
20	Alienated, patented, granted, etc.[18]	1,396	7,644	8,485[8]	24,535[8]	29,217
21	In process of alienation	Nil	[15]	200[8]	4,730[8]	[15]
22	Dominion Crown Lands[11] including leased lands, but not including Indian Reserves or Dominion National Parks	Nil	8	2	18[14]	103
23	Indian Reserves[4], [10]	2	19	38	194	1,009
24	Dominion National Parks[10]	Nil	Nil	Nil	Nil	4
25	Provincial Crown Lands including leased lands, but not including Provincial Parks	Nil	5,334	8,559	301,350[8]	199,037
26	Provincial Parks	Nil	271[8]	450[8]	4,235[8]	3,130[8]
27	**Totals, Land Area[3]**	**1,398**	**13,276**	**17,734**	**335,062**	**232,500**

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[1] These figures are preliminary from the 1931 census and should be taken as subject to correction. [2] Figures from the Forest Service, Department of the Interior. [3] Figures from the Topographical Survey, Department of the Interior. For the Northwest Territories and Yukon, they are approximate only. [4] From Annual Report of Department of Indian Affairs, 1932. [5] Woodlots or forested areas of occupied farms as reported in 1931 census. [6] Estimated as 3 p.c. of occupied and abandoned farms, except for the Prairie Provinces which are from the 1930 Year Book, p. 961. [7] Assumed to be the sum of occupied and abandoned farms and road allowances, except for the Prairie Provinces. [8] Figures are obtained from provincial sources. [9] From the 1930 Year Book, p. 961. This total is not the sum of the items, because of alienated lands in the form of grants to railway companies, grants to the Hudson's Bay Co., school land endowment, etc. [10] These are Dominion lands but are not classed with Crown lands; see footnote 11. [11] This classification of Dominion Crown lands includes only Ordnance lands and Military lands in the provinces and does not take into consideration Dominion National Parks and Indian reserves which, while Dominion lands, are set aside by Statute or Treaty and are not now freely disposable by the Dominion Government. In the Yukon and N.W.T. column, however, areas aggregating 338,916,000 acres, which have been set apart by Order in Council as game preserves and sanctuaries in which only native Indians and Eskimos may hunt, but which have not been permanently dedicated to this purpose by Parliament, are still regarded as Crown lands. Such preserves include: the Arctic Islands Preserve, 281,027,000 acres; Yellowknife Preserve, 44,800,000 acres; Slave River Preserve, 1,377,000 acres; Peel River Preserve, 2,112,000 acres; and Thelon Game Sanctuary, 9,600,000 acres. [12] These are waste lands as regards surface resources only and include rock, open muskeg, burnt-over lands which are not re-stocking, and those above timber line. All such lands are by no means economically barren since in many cases they are sources of valuable mineral wealth. [13] This total is not the addition of the preceding items because the figure obtained from pro-

Lands in Canada (*circa*) 1933.

(Areas in thousands of acres.)

Description of Land Areas.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Total for Canada.	No.
Classification by Type of Land—Existing and Potential Agricultural Lands—							
Alienated, Patented, Granted, etc.—							
Occupied farm lands[1]	15,132	55,673	38,977	3,542	5	163,260	1
Farm land under crop[1]	5,842	21,951	12,012	450	1	57,670	
Improved farm land[1]	8,522	33,549	17,749	705	1	85,521	
Abandoned farms[1]	1,168	1,024	1,410	249	Nil	5,289	2
Road allowances[6]	978	1,469	1,291	114	Nil	5,393	3
Totals, Alienated, Patented, Granted, etc.[7]	22,279[9]	61,218[9]	45,477[9]	3,905	5	185,794	4
Agricultural Land under Forest—							
Farm woodlots[5]	1,998	3,449	3,927	1,155	2	26,375	5
Unoccupied[2]	1,330	2,960	6,020	2,560[8]	6,400[2]	58,391	6
Totals, Agricultural Land under Forest	3,328	6,409	9,947	3,715	6,402	84,766	7
Dominion Crown Lands[11] suitable for Agriculture	[15]	[15]	[15]	[15]	9,000[3]	9,013[19]	8
Provincial Crown Lands suitable for Agriculture other than already included in Item 6[16]	8,771	15,896	25,953	16,138	Nil	102,962	9
Grazing Leases (included in Item 9	74[8]	3,493[8]	3,367[8]	72[8]	[15]	7,073[19]	
Totals, Agricultural Lands[3]	**32,380**	**80,074**	**87,450**	**22,603**	**9,005**	**361,162**	10
Existing and Potential Forest Lands—							
Alienated, granted, etc.—							
Timber lands alienated[2]	21,389	3,340	8,730	11,620	Nil	64,792	11
Farm woodlots[5]	1,998	3,449	3,927	1,155	2	26,375	12
Totals, Alienated, Granted, etc	23,387	6,789	12,657	12,775	2	91,267	13
Under lease, licence to cut, timber berths, pulp concessions, etc. (included in Item 16)	2,438[8]	460[8]	621[8]	4,355[8]	[15]	113,828[19]	14
Dominion Lands under forest	[15]	[15]	[15]	[15]	36,600	36,678[19]	15
Indian Reserves under forest[4]	335	549	343	439	2	2,756	16
Provincial Lands under forest	35,200	44,500	42,240[8]	109,200	Nil	575,550	17
Totals, Forest Lands[17]	**59,520**	**52,582**	**81,132**	**123,267**	**38,400**	**737,923**	18
Waste Lands[12]	**55,330**	**26,057**	[15]	**81,826**	**895,677**	**1,291,279[19]**	19
Summary Classification, by Tenure—							
Alienated, patented, granted, etc.[18]	43,668	64,558	54,207	12,813[8]	5	246,528[18]	20
In process of alienation	[15]	[15]	[15]	6,148[8]	Nil	11,078[19]	21
Dominion Crown Lands[11] including leased lands, but not including Indian Reserves or Dominion National Parks	3	30	66	103	934,353	934,686	22
Indian Reserves[4, 10]	475	1,368	1,328	744	2	5,179	23
Dominion National Parks[10]	735	1,196	13,436	1,098	2,320	18,789	24
Provincial Crown Lands including leased lands, but not including Provincial Parks	95,742	85,148	90,241	216,385[8]	Nil	1,001,796	25
Provincial Parks	Nil	4	2	1,390[8]	Nil	9,482	26
Totals, Land Area[3]	**140,623**	**152,304**	**159,232**	**223,981[13]**	**936,680**	**2,212,790[13]**	27

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vincial sources of 216,385,000 acres for Provincial Crown lands including leased lands is based on a total land area for the province of B.C. of 238,483,200 acres as against 223,980,800 acres estimated by the Topographical Survey. [14] About 14,713 acres of this is controlled by the Department of National Defence. [15] No estimate available. [16] This item is an approximation got by subtracting the sum of items 4, 6 and 8 from item 10. [17] This item is the total productive and unproductive forest area, by provinces, as estimated by the Forest Service of the Department of the Interior and given, in square miles, on p. 42 of this volume. It should be the addition of items 13, 15, 16 and 17 but is greater than these in certain provinces because item 15 does not include the forested areas of Dominion National Parks for which estimates are not available. Forested areas of Indian reserves are not included in item 15, but are shown separately as item 16. Apart from these exceptions, items 15 and 17 include all Dominion and Provincial lands under forest (Crown lands, National parks, Ordnance lands, Military lands, reserves, etc.). [18] This item includes lands in process of alienation where such are not reported under item 21. [19] For the provinces indicated only.

[20] There is practically no waste land in New Brunswick.

Subsection 2.—Provincial Public Lands.

In the Maritime Provinces, in Quebec, Ontario and British Columbia (except the Railway Belt and the Peace River Block) the public lands have been administered by the Provincial Governments since Confederation. Owing to the transfer of the natural resources to the Prairie Provinces and British Columbia, as outlined in Chapter XXVII, p. 1019 of the 1931 Year Book, public lands in all provinces are now under provincial administration. In Prince Edward Island, as all the land is alienated, there are no provincial public lands.

Information regarding the amounts of disposable public land and the terms on which it may be secured is regularly given from year to year for each of the provinces in the Canada Year Book. However, since the revisions for the 1933 Year Book have been of a minor character and as there is a heavy pressure upon space, it has been decided to refer those interested in securing provincial public lands to pp. 921 to 927 of the 1932 Year Book, and to the following officials of the respective provinces: Minister of Lands and Forests, Halifax, N.S.; Deputy Minister of Lands and Mines, Fredericton, N.B.; Deputy Minister of Lands and Forests, Quebec, Que.; Minister of Lands and Forests, Parliament Bldgs., Toronto, Ont.; Director of Lands, Department of Mines and Natural Resources, Winnipeg, Man.; Director of Lands, Department of Natural Resources, Regina, Sask.; Publicity Commissioner, Edmonton, Alta.; Deputy Commissioner of Lands, Victoria, B.C.

Section 2.—National Defence.[1]

Before the outbreak of the Great War, the Canadian Militia consisted of a Permanent Force, which on Mar. 31, 1914, numbered 3,000 officers, non-commissioned officers and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. After the outbreak of war on Aug. 4, 1914, successive contingents of troops of all arms were recruited, equipped, trained and dispatched by the Dominion Government to Great Britain for active service. When hostilities ceased on Nov. 11, 1918, there had been sent overseas, for active service in the Canadian Expeditionary Force, about 418,000 officers, non-commissioned officers and men.[2] In addition to these several thousand Canadians served with the Royal Air Force.

Organization.—Prior to 1922, three departments of the Canadian Government were concerned with the defence of Canada, *viz.*: the Department of Militia and Defence; the Department of the Naval Service; and the Air Board.

During the Session of 1922, the National Defence Act was passed, consolidating the Department of Militia and Defence, the Department of the Naval Service and the Air Board into the Department of National Defence. This Act became effective by proclamation on Jan. 1, 1923. Under it, there is a Minister of National Defence and a Deputy Minister of National Defence. To advise the Minister, a Defence Council has been constituted by Order in Council, consisting of a President (the Minister), a Vice-President (the Deputy Minister), and the following members: the Chief of the General Staff and the Chief of the Naval Staff. The Adjutant-General, the Quartermaster-General and the Senior Air Officer, Royal Canadian Air Force, are associate members. There is also a Secretary of the Council.

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[1] Revised by H. W. Brown, Asst. Deputy Minister, Department of National Defence.

[2] For the detailed expenditures of the Dominion Government on account of war appropriations in the fiscal years 1915-21, see the Canada Year Book, 1921, p. 798.

Subsection 1.—The Naval Service.

The Naval Service of Canada was established by the Naval Service Act, 1910 (9-10 Edw. VII, c. 43), the main provisions of which were described in the 1910 Year Book, pp. xxvi-xxix.

The Department of Naval Service was amalgamated with the Department of Militia and Defence and the Canadian Air Board, to form the Department of National Defence, in 1922.

The Royal Canadian Navy and its Reserve Forces are under the direction of the Chief of the Naval Staff, who is a member of the Defence Council. The Service consists of:—

1. Royal Canadian Navy (permanent).
2. Royal Canadian Naval Reserve (non-permanent).
3. Royal Canadian Naval Volunteer Reserve (non-permanent).

Administrative and operational staff for all three Forces is provided from the Royal Canadian Navy.

The Royal Canadian Navy.—The Royal Canadian Navy has an authorized complement of 104 officers and 792 ratings. A large majority of the men of the R.C.N. are serving under 7-year engagements. A small proportion consists of specialist gunnery, torpedo, and engine-room ratings, lent from the Royal Navy (in 1933 this proportion amounted to 9 p.c.).

A proportion of the officers of the Royal Canadian Navy serves periodically in ships of the Royal Navy, to acquire experience in capital ships, cruisers, etc., and training courses are arranged for selected officers at the instructional schools of the Royal Navy to qualify in war staff, gunnery, torpedo, wireless and other duties. Courses for selected men in the gunnery, torpedo, wireless telegraphy and mechanical training schools of the Royal Navy are similarly arranged.

The ships of the Royal Canadian Navy are:—

H.M.C.S. *Saguenay* (destroyer—in commission).
H.M.C.S. *Skeena* (destroyer—in commission).
H.M.C.S. *Champlain* (destroyer—in commission).
H.M.C.S. *Vancouver* (destroyer—in commission).
H.M.C.S. *Armentières* (minesweeper—in commission).
H.M.C.S. *Festubert* (minesweeper—in commission).
H.M.C.S. *Ypres* (minesweeper—in reserve).

Naval training establishments, comprising: naval barracks; gunnery drill sheds, with all modern appliances for teaching gun-laying, sight-setting, etc.; torpedo and electrical schools; parade grounds; and other equipment, are maintained at Halifax and Esquimalt. Naval dockyards, with work shops, etc., for refitting and supplying necessary stores to H.M.C. ships, are also maintained at Halifax and Esquimalt.

Royal Canadian Naval Reserve.—The establishment of the Royal Canadian Naval Reserve is 70 officers and 430 men recruited from among sea-faring personnel. Officers have been appointed to act as registrars at Halifax, Charlottetown, Quebec, Montreal, Vancouver.

Officers and men of the Royal Canadian Naval Reserve attend naval training at Halifax and Esquimalt for 42 days for the first year of enrolment and for 14 days annually or biennially thereafter. They are permitted to volunteer for service afloat up to a maximum of six months during each period of enrolment. The period of enrolment in the Royal Canadian Naval Reserve is five years.

Royal Canadian Naval Volunteer Reserve.—The establishment of the Royal Canadian Naval Volunteer Reserve is 70 officers and 930 men, distributed as follows: Halifax (half company); Saint John (half company); Charlottetown (half company); Quebec (half company); Montreal (company); Ottawa (half company); Toronto (company); Hamilton (half company); Winnipeg (company); Saskatoon (half company); Regina (half company); Edmonton (half company); Calgary (half company); Vancouver (half company); Prince Rupert (half company).

Each company or half company is under the immediate command of an officer of the R.C.N.V.R., appointed as company commanding officer. The company commanding officer is assisted by other commissioned officers of the Force.

A petty officer instructor (a highly qualified ex-petty officer of the Royal Navy or of the Royal Canadian Navy) is employed at each company headquarters to give instruction to men of the company in gunnery, torpedo practice, seamanship and other naval subjects.

Each officer and man of the R.C.N.V.R. performs annually a minimum of 30 drills of not less than one hour's duration at company headquarters. In actual practice 40 to 50 drills have been performed annually by each member of the company. Officers and men also attend from two to three weeks naval training annually at the naval bases at Halifax or Esquimalt, or at sea in H.M.C. or H.M. ships.

Officers and men who can obtain the necessary leave of absence are permitted to perform a maximum of four months voluntary service during each period of enrolment, and a large number have availed themselves of this opportunity of gaining extended naval experience under sea-going conditions. The period of enrolment and of re-enrolment in the R.C.N.V.R. is three years.

Subsection 2.—Military Forces.

The Militia of Canada is constituted by the Militia Act. The Active Militia is divided into the Permanent and the Non-Permanent Militia.

Permanent Militia.—The Permanent Force consists of the following units:—

Cavalry.—The Royal Canadian Dragoons; Lord Strathcona's Horse (Royal Canadians).
Artillery.—The Royal Canadian Horse Artillery Brigade ("A", "B" and "C" Batteries); Royal Canadian Artillery (Nos. 1, 2 and 5 Heavy Batteries and No. 3 Medium Battery).
Engineers.—Royal Canadian Engineers (13 detachments and 1 field company).
Signals.—The Royal Canadian Corps of Signals.
Infantry.—The Royal Canadian Regiment; Princess Patricia's Canadian Light Infantry; The Royal 22nd Regiment (a French-Canadian regiment).
Army Service Corps.—The Royal Canadian Army Service Corps (12 detachments).
Medical Corps.—The Royal Canadian Army Medical Corps (12 detachments).
Veterinary Corps.—The Royal Canadian Army Veterinary Corps (8 detachments).
Ordnance Corps.—The Royal Canadian Ordnance Corps (12 detachments).
Pay Corps.—The Royal Canadian Army Pay Corps (12 detachments).
Military Clerks.—The Corps of Military Staff Clerks (12 detachments).

The strength of the Permanent Active Militia is limited by the Amending Act of 1919 to 10,000, but at present the limited establishment is less than 3,800.

Schools of Instruction.—The Canadian Small Arms School is the only school which is an independent unit of the Permanent Force, but at all stations of the Permanent Force in Canada Royal Schools of Instruction are conducted.

Non-Permanent Militia.—The Non-Permanent Militia consists of:—

35 Regiments of Cavalry and Mounted Rifles.
69 Field Batteries, Canadian Artillery.
14 Medium Batteries, Canadian Artillery.
11 Heavy Batteries, Canadian Artillery.
3 Anti-Aircraft Sections, Canadian Artillery.
15 Field Companies of Engineers.
2 Fortress Companies of Engineers.
7 Field Troops of Engineers.
10 Divisional Signals.
2 Fortress Signal Companies.
7 Signal Troops.
22 Contingents, Canadian Officers' Training Corps.
123 Battalions of Infantry.
15 Machine Gun Units.
12 Divisional Canadian Army Service Corps.
51 Units of the Canadian Army Medical Corps.
11 Detachments of the Canadian Dental Corps.
11 Detachments of the Canadian Army Veterinary Corps.
11 Detachments of the Canadian Ordnance Corps.
12 Detachments and 1 Base Post Office of the Canadian Postal Corps.

The total establishment of the Non-Permanent Militia is 9,029 officers and 125,722 other ranks, a total of 134,751, distributed as shown in the following table:—

2.—Permanent and Non-Permanent Active Militia in Canada, 1932.

Arm of Service.	Permanent Active Militia.		Non-Permanent Active Militia.	
	Personnel.	Horses.	Personnel.	Horses.
Staff and General List	49	–	–	–
Cavalry and Mounted Rifles	415	317	16,637	9,809
Field Artillery	407	112	9,071	4,586
Medium Artillery	53	–	2,012	848
Heavy Artillery and Anti-Aircraft Sections	242	2	1,532	45
Engineers	273	16	3,421	812
Signals	276	–	4,567	2,220
Railway Corps	–	–	363	–
Infantry	906	31	79,866	87
Officers' Training Corps	–	–	4,303	–
Machine Gun Corps	–	–	6,516	744
Army Service Corps	274	46	1,286	–
Non-Combatants	876	–	5,177	688
Totals	**3,771**	**524**	**134,751**	**19,839**

Reserve Militia.—In addition to the Active Militia, there is also the Reserve Militia, a framework designed to serve as a basis for contingent military organization. Drill and training are voluntary and entail no expense to the public.

The reserve formations of the Active Militia, as distinguished from the Reserve Militia mentioned above, comprise:—

The Reserve of Officers (general list).
Reserve unit for each active unit.
Reserve Regimental Depots (Cavalry and Infantry).

The reserve units of the Active Militia are intended for the purpose of providing for the organization of the officers and men who have completed their service in the Active Militia or who have otherwise received a military training. On completion of service in the Active Militia men are not posted automatically to reserve units. These units are recruited by specific enlistment.

Military Districts.—For the command, training and administration of the Canadian Militia, Canada is divided into 11 military districts, each under a commander assisted by a district staff.

Militia Appropriations.—The Militia appropriations for the six fiscal years ended Mar. 31, 1928-33, are shown in Table 3.

3.—Money Voted by Parliament for the Militia, fiscal years ended Mar. 31, 1928-33.

Item.	1928.	1929.	1930.	1931.	1932.	1933.
	$	$	$	$	$	$
Administration	341,000	349,000	349,000	345,000	332,000	320,000
Cadet Services	500,000	500,000	500,000	500,000	400,000	360,000
Contingencies	43,000	44,000	44,000	44,000	44,000	35,000
Engineer Service and Work	803,900	830,000	830,000	830,000	736,000	327,500
General Stores	682,799	988,800	988,800	1,000,300	683,000	663,500
Manufacturing Establishments	472,395	587,000	587,000	587,000	550,000	
Non-Permanent Active Militia	2,059,800	2,309,000	2,301,100	2,324,500	2,006,000	1,887,400
Permanent Force	4,887,500	5,038,000	5,045,900	5,011,000	5,050,000	4,844,000
Royal Military College	365,000	375,000	375,000	375,000	386,000	360,500
Topographic Survey	40,000	45,000	45,000	45,000	45,000	20,000
Totals	**10,195,394**	**11,065,800**	**11,065,800**	**11,061,800**	**10,232,000**	**8,817,900**
Civil Government	808,010[1]	800,505[1]	850,755[1]	849,860[1]	832,230[1]	727,035[1]
Grand Totals	**11,003,404**	**11,866,305**	**11,916,555**	**11,911,660**	**11,064,230**	**9,544,935**

[1] Department of National Defence.

Subsection 3—Air Service.

Under the Act creating the Department of National Defence, the powers, duties and functions vested in the Air Board by the Air Board Act of 1919 are now administered under the direction of the Minister of National Defence.

The Royal Canadian Air Force is composed of the Permanent Active Air Force, the Non-Permanent Active Air Force, and a Reserve of Officers. The Royal Canadian Air Force administers and controls all military air operations and air operations for civil government departments. The duties of the Royal Canadian Air Force are as follows:—

(a) To organize, train and maintain an air force for the defence of Canada.

(b) To assist in the development of civil aviation by—

(i) Providing advanced flying training to civilian pilots, instructors and commercial pilots.

(ii) Initial development of air routes.

(iii) Technical supervision of airworthiness and inspection of aircraft belonging to private and commercial operators, and aircraft constructed or overhauled by aircraft manufacturing firms, and acting as consultant in matters pertaining to civil aviation generally.

(c) The conduct of flying required to assist the several departments of the Dominion Government in the development and conservation of the country's natural resources, and other related services.

Permanent Active Air Force stations and units are located as follows:—

Location.	Duty.
R.C.A.F. Headquarters, Ottawa, Ont.	
R.C.A.F. Station, Camp Borden, Ont.	Training.
R.C.A.F. Station, Trenton, Ont.	Training.
R.C.A.F. Station, Ottawa, Ont.	Test and experimental work and civil government air operations.
R.C.A.F. Station, Winnipeg, Man.	Civil government air operations.
R.C.A.F. Station, Vancouver, B.C.	Coast reconnaissance and civil government air operations.
R.C.A.F. Station, Dartmouth, N.S.	Care and maintenance basis.
R.C.A.F. Station, High River, Alta.	Care and maintenance basis.
No. 1 R.C.A.F. Depot, Ottawa, Ont.	Stores and repair depot.
R.C.A.F. Photographic Section, Ottawa, Ont.	

The following Non-Permanent Active Air Force units are now in process of organization: No. 10 Army Co-operation Squadron, Toronto, Ont.; No. 11 Army Co-operation Squadron, Vancouver, B.C.; No. 12 Army Co-operation Squadron, Winnipeg, Man.

The total strength of the Royal Canadian Air Force on Dec. 31, 1932, was 98 officers and 592 airmen.

Subsection 4.—Civil Aviation.[1]

The Civil Aviation Branch is under the Controller of Civil Aviation, who is directly responsible to the Deputy Minister. Its duties include the inspection of licences and registration of aircraft, air harbours, commercial and private air pilots, air engineers and air navigators. In addition to these duties, the location and construction of air routes and any matters connected with airship services are administered in this branch.

Civil aviation in the Dominion has had its chief development in connection with the exploration and conservation of the natural resources of the provinces, including forestry protection, air photography, and transport of men and supplies to remote points and mining districts. At the beginning of 1932, 19 regular air mail routes were in operation. Three air mail routes were suspended in the early part of the year so that on Dec. 31, 1932, there were sixteen air mail routes in operation.

On Dec. 31, 1932, there were certificates and licences in force as follows: private air pilots, 356; commercial air pilots, 419; air engineers, 341; registration of aircraft, 348; air-harbour licences, 91.

Subsection 5.—The Royal Military College.

The Royal Military College of Canada was founded in 1876 by the Honourable Alexander Mackenzie, Prime Minister of Canada. Since its foundation, 2,308 gentlemen cadets have been enrolled, and of this number 196 are now in attendance.

The maximum number of cadets who may be in residence at any one time is restricted by Order in Council to two hundred.

The Royal Military College has a very distinguished record in connection with the War. Of the 914 graduates and ex-cadets who served, 353 were granted commissions direct from the College, and 43 enlisted with a view to obtaining commissions; 156 ex-cadets were reported as killed in action, died of wounds, or missing. Ex-cadets of the College won the following honours and decorations: 1 Victoria Cross and 3 recommendations for the Victoria Cross, 106 Distinguished Service Orders, 109 Military Crosses, 2 Distinguished Flying Crosses, 62 other British decorations, 42 foreign decorations. Three Canadian and one Australian divisions were commanded by graduates of the College.

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[1] See also pp. 692-694.

Ex-cadets who have served in the Army, either in the Regular Forces or during the Great War, include 1 general, 5 lieutenant-generals, 17 major-generals, and 29 brigadier-generals or brigadiers. Eleven knighthoods have been conferred on ex-cadets for distinguished service.

The establishment of the College, as stated in the Act of 1874 (37 Vict., c. 36) was "for the purpose of imparting a complete education in all branches of military tactics, fortifications, engineering and general scientific knowledge in the subjects connected with and necessary to a thorough knowledge of the military profession, and for qualifying officers for command and staff appointments". In addition to the foregoing, the course of instruction is such as to afford a thorough practical and scientific training in civil engineering, surveying, physics and chemistry, English and French. Strict discipline, combined with physical training, riding, drill and outdoor games, forms part of the curriculum.

The College is situated on a beautiful peninsula, one mile from Kingston, with the Cataraqui river emptying into the St. Lawrence river at its junction with lake Ontario on the one side, and Navy bay on the other. The grounds cover about 500 acres. The buildings of the College proper are situated on the above-mentioned peninsula, comprising 60 acres. The remainder of the grounds, on which stands the historic Fort Henry, is at the disposal of the College for use as a training area. On the point of the College peninsula is situated Fort Frederick, built in 1837 when Kingston became the capital of Canada, the fort comprising a portion of the defences of Kingston. The College is under the supervision of the Department of National Defence, and is inspected annually by an advisory board composed of leading Canadian citizens, both civil and military, which makes its reports and recommendations to the Minister of National Defence. The staff is composed of a commandant, a staff-adjutant, and a competent staff of civil and military professors and instructors.

A four-year course leads to a "diploma with honours", a "diploma" or a "certificate of military qualification". A number of commissions in the Canadian Permanent Force and the Royal Canadian Air Force, as well as commissions in the British Regular Forces, the Indian Army, and the Royal Air Force, are offered annually to graduates; and for cadets who desire to obtain commissions in the Royal Canadian Navy a limited number of naval cadetships are available each year to cadets who successfully complete the first two years of study and who were under 18 years of age at the time of entry into the College. To those graduates joining the British Army, the privilege of one year's seniority is granted in the British or Indian Armies. This has been arranged in order to equalize the seniority of graduates of the Royal Military College of Canada with those of the Royal Military Academy, Woolwich or the Royal Military College, Sandhurst, since the courses at the latter institutions are shorter than the Canadian.

The principal Canadian universities admit recommended graduates to the fourth year of their civil engineering courses and to the third year of other engineering courses; and some of the universities admit graduates to the third years of arts and science courses.

The R.M.C. diploma is accepted by the Law Societies and Bar Associations of Ontario, Nova Scotia, Quebec, Manitoba, Saskatchewan, British Columbia and Alberta, as the equivalent of a B.A. degree for admission to the study of law. The Dominion Association of Chartered Accountants likewise accepts R.M.C. graduates as registered students under the same conditions as university graduates.

Entrance to the College is on a competitive basis. Candidates are required to pass a rigid medical examination, and to have obtained junior matriculation or an acceptable equivalent. Applications for admission to the College should reach The Secretary, Department of National Defence, Ottawa, before May 31 of each year.

Section 3.—Department of Public Works.[1]

Since Confederation and before, the constructing department has been known as the Department of Public Works. In 1879 the railways and canals were placed under the control of a new department, the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department, and the smaller drill halls and armouries to the Department of National Defence. The work of the Department of Public Works is now divided into three principal branches, *viz.*, the Engineering Branch, the Architect's Branch and the Telegraph Branch.

Engineering.—The Engineering Branch conducts the construction and repair of wharves, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, maintenance and operation of Government dredging plant; the construction and maintenance of graving docks; the construction and maintenance of interprovincial bridges and approaches thereto, also of bridges on highways of national importance in the Northwest Territories; the maintenance of military roads, also hydrographic and ordinary surveys and examinations, inclusive of some precise levelling and geodetic measurements which are required for the preparation of plans, reports and estimates; river gaugings and metering; the testing of cements and materials of construction; the licensing of international and interprovincial ferries; and the control of works constructed in or over navigable waters by authority of the Navigable Waters Protection Act (R.S.C., 1927, c. 140).

Architecture.—The Architect's Branch constructs and maintains Government buildings, post offices, customs houses, examining warehouses, and constructs quarantine, immigration and experimental farm buildings, armouries, military hospitals and drill halls, and telegraph offices.

Telegraphs.—The Telegraph Branch has control of the construction, repair and maintenance of all Government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia and Yukon. (See also pp. 721-723.)

Graving Docks.—There are 5 graving or dry docks built and owned by the Canadian Government. The dimensions of these docks are shown in Table **4**. The dock at Kingston, Ontario, is under lease to the Kingston Shipbuilding Company. The dock at Lauzon, Quebec, east of the old dock, is 1,150 feet long (divided into two parts 650 and 500 feet respectively) and 120 feet wide, with depth of 40 feet at high water. It cost about $3,850,000. Under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17), several docks have been subsidized by payments of 3 or 3½ p.c. per annum on the original cost for a given number of years, as shown in Table **5**.

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[1] Revised by J. M. Somerville, Assistant Secretary, Department of Public Works.

4.—Dimensions of Graving Docks Owned by the Dominion Government.

Location.	Length.	Width at—			Depth of Water on Sill.	Rise of Tide.	
		Coping.	Bottom.	Entrance.		Spring.	Neap.
	ft.	ft.	ft.	ft.	ft.	ft.	ft.
Lauzon, Que. "Champlain"	1,150	144	105	120	40·0 H.W.	18	13·3
Lauzon, Que. "Lorne"	600·3	100	59·5	62	25·8 H.W.	18	13·3
Esquimalt, B.C. (old dock)	450·7	90	41	65	29·0 H.W.	7 to 10	3 to 8
Esquimalt, B.C.	1,150	149	126	135	40·0 H.W.	7 to 10	3 to 8
Kingston, Ont.	343·6	79	47	55	16·0	–	–

5.—Dimensions and Cost of Graving Docks Subsidized under the Dry Dock Subsidies Act, 1910.

Location.	Length.	Width.	Depth over Sill.	Total Cost.	Subsidy.
	ft.	ft.	ft.	$	
Collingwood No. 1, Ont.	515·8	59·8	14·8	500,000	3 p.c. for 20 years.
Collingwood No. 2, Ont.	413·2	95	19·2	306,965	3 p.c. for 20 years.
Port Arthur, Ont.	708·3	77·6	16·2	1,258,050	3 p.c. for 20 years.
Montreal, Que., floating dock, "Duke of Connaught"	601	100	31·5	3,000,000	3½ p.c. for 35 years.
Prince Rupert, B.C. (floating dock)	600	100	32	2,199,168	3½ p.c. for 35 years.
Saint John, N.B.	1,150	133	40	5,500,000	4½ p.c. for 35 years.
North Vancouver, B.C. (floating dock)	556·5	98	28	2,500,000	4½ p.c. for 35 years.

Expenditure and Revenue.—Table 6 shows the expenditures and revenues of the Public Works Department of the Dominion Government, for the fiscal years 1927-32. For the fiscal year 1932 the expenditure was $21,601,009, as compared with $33,371,613 in 1931—a decrease of $11,770,604, largely accounted for by reduced expenditures for harbours and rivers, dredging and public buildings.

6.—Expenditures and Revenues of the Public Works Department, fiscal years ended Mar. 31, 1927-32.

EXPENDITURES (exclusive of Civil Government Appropriations).

Item.	1927.	1928.	1929.	1930.	1931.	1932.
	$	$	$	$	$	$
Harbour and river works	3,835,914	4,198,905	5,230,360	7,980,558	11,785,509	5,000,984
Dredging plant, etc	1,918,798	2,879,559	3,106,638	3,310,953	4,305,126	2,520,843
Roads and bridges	9,717	38,629	38,896	84,495	190,383	342,330
Airports	–	84,251	540,976	780,144	93,214	–
Public buildings	6,984,720	8,252,449	9,902,676	12,304,578	15,792,574	11,264,114
Telegraphs	802,495	840,451	893,888	885,871	928,975	644,627
Miscellaneous	199,309	302,170	236,042	260,924	275,832	235,177
Unemployment relief works	–	–	–	–	–	1,592,934
Totals	**13,750,953**	**16,596,414**	**19,948,576**	**25,607,523**	**33,371,613**	**21,601,009**
REVENUES.						
Graving docks	120,402	87,322	102,065	121,909	117,759	78,167
Rents	96,315	101,571	97,114	116,697	103,353	179,958
Telegraphs	309,488	298,663	356,485	356,469	242,441	188,248
Casual revenue	108.605	98,435	83,311	67,130	93,304	464,479
Ferries	1,048	1,361	1,358	1,318	2,823	2,869
Totals	**635,858**	**587,352**	**640,333**	**663,523**	**559,680**	**913,722**

Section 4.—The Indians and Eskimos of Canada.

Subsection 1.—The Indians of Canada.[1]

The Indians of Canada who are wards of the Department of Indian Affairs number about 108,012, their numbers varying slightly from year to year. A small yearly increase is evident, and the popular notion that the race is disappearing is not in accordance with facts. Before they were subjected to the degenerating effects of European civilization and the devastating results of the many colonial wars, the numbers of the Indians were undoubtedly larger, but any reliable information as to the aboriginal population during either the French or the early British *régime* is non-existent, and there is no adequate basis for a comparison between the past and present aboriginal populations. An interesting sketch of the progress of the Indians of Canada since Confederation will be found in the Report of the Department of Indian Affairs, 1927.

Administration.[2]—Reserves have been set aside for the various bands of Indians throughout the Dominion, and the Indians located thereon are under the supervision of the local agents of the Department. The activities of the Department, as guardian of the Indians, include the control of Indian education, health, etc., the development of agriculture and other pursuits among them, the administration of their funds and legal transactions, and the general supervision of their welfare.

The local administration of the Indian bands on the reserves scattered throughout the Dominion is conducted through the Department's agencies, of which there are in all 116. The number of bands included in an agency varies from one to more than 30. The staff of an agency usually includes various officers in addition to the agent, such as medical officer, clerk, farm instructor, field matron, constable, stockman, etc., according to the special requirements of the agency in question. The work of the agencies is supervised by the Department's inspectors, each inspector having charge of a certain number of agencies. Expenditures upon destitute Indians are made by the Dominion Government, either from public funds or from the tribal funds of the Indians themselves.

The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised he ceases to be an Indian under the law and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in dealing with this problem, as Indians who become enfranchised lose the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

Treaties.—In the older eastern provinces, the history of the Indians has been one of slow development with that of the community. In western Ontario and the Prairie Provinces the situation has been different. There, the rapid spread of civilization made it necessary to take prompt and effective measures to protect the moral claims of the Indians, which are recognized by the Government. Accordingly, treaties were entered into with the Indians, whereby the latter ceded to the Crown their aboriginal title and interest in the country. In consideration of such cession the Crown agreed to set aside adequate reserves, make cash grants, provide per capita annuities, give assistance in agriculture, stock raising, hunting, trapping, etc., as particular circumstances might require, provide education for the Indian children, and otherwise safeguard the Indians' interests. These treaties have been made from time to time as occasion arose and as new territories were opened up. No treaty has been made with the Indians of British Columbia, but their welfare has received no less attention from the Government on that account.

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[1] Revised by A. F. MacKenzie, Secretary, Department of Indian Affairs.
[2] For an outline of the early administration, see p. 937 of the 1932 Year Book.

Government Expenditure.—On Mar. 31, 1932, the capital of the Indian Trust Fund, which a year earlier had amounted to $13,764,581, had decreased to $13,644,079. The amounts expended from the Consolidated Revenue Fund were as follows: voted by Parliament for the purposes of the Department, $4,656,030; annuities by statute, $224,292.

Statistics.—Statistical tables of population, school attendance, income and agricultural activities of the Indians in Canada follow. In Table **7** the populations for 1871-1931 are compiled from reports of the various censuses since Confederation, while the statistics and other information in the remaining tables are taken from the latest Annual Report of the Department of Indian Affairs. The Department of Indian Affairs takes a quinquennial census of Indians under its control, *i.e.*, those who are wards of the Department, whereas census figures include all persons of Indian origin. For 1929 the Department reported that such Indians increased in number from 104,894 in 1924 to 108,012, or by nearly 3 p.c. in the quinquennium. The figures of the decennial census include some thousands of persons of Indian race who are living off the reserves as ordinary citizens of Canada.

7.—Indian Population of Canada at the Decennial Censuses of 1871-1931.

Province or Territory.	1871.[1]	1881.[1]	1891[2].	1901.	1911.	1921.	1931.
Prince Edward Island	323	281	314	258	248	235	233
Nova Scotia	1,666	2,125	2,076	1,629	1,915	2,048	2,191
New Brunswick	1,403	1,401	1,521	1,465	1,541	1,331	1,685
Quebec	6,988	7,515	13,361	10,142	9,993	11,566	12,312
Ontario	12,978	15,325	17,915	24,674	23,044	26,436	30,368
British Columbia	23,000	25,661	34,202	28,949	20,134	22,377	24,599
Manitoba	56,000	56,239	51,249	16,277	7,876	13,869	15,417
Saskatchewan				26,304	11,718	12,914	15,268
Alberta					11,630	14,557	15,258
Yukon				3,322	1,489	1,390	1,543
Northwest Territories				14,921	15,904	3,873[4]	4,046
Totals	**102,358**	**108,547**	**120,638**	**127,941**[3]	**105,492**	**110,596**	**122,920**

[1] Census figures in the organized provinces and estimates for the rest of Canada.

[2] Racial origin not taken in 1891; the figures have been taken from the report of the Department of Indian Affairs of that year.

[3] Includes 34,481 "half breeds".

[4] The smaller Indian population of the Northwest Territories in 1921 is to be ascribed to the extension of the boundaries of Quebec, Ontario and Manitoba in 1912. This also accounts for the increase in the 1921 Indian population of these provinces.

Indian Education.—The educational work of the Department is now very extensive. In the fiscal year ended Mar. 31, 1932, a total of 350 Indian schools were in operation, including 80 residential schools for Indians with an enrolment of 8,213, and 261 day schools for Indians with an enrolment of 8,775 Indian pupils, also 9 combined public and Indian schools, with 175 Indian pupils enrolled. The total enrolment in the Indian schools has increased from 12,799 in 1915-16 to 17,163 in 1931-32 and the average attendance from 8,080 to 13,107 or from 63·1 p.c. to 76·4 p.c. of the enrolment. Continuation and high school work is now being taught in several of the day and residential schools. The amount spent on Indian education in the fiscal year ended Mar. 31, 1932, was $2,004,957.

8.—Enrolment and Average Attendance of Pupils at Indian Schools, fiscal years ended Mar. 31, 1916-32.

Fiscal Year.	Residential Schools.		Day Schools.		All Schools.		Percentage of Attendance.
	Enrolment.	Average Attendance.	Enrolment.	Average Attendance.	Enrolment.	Average Attendance.	
1916	4,661	4,029	8,138	4,051	12,799	8,080	63·1
1917	4,520	4,149	7,658	4,136	12,178	8,285	68·0
1918	4,692	4,081	7,721	3,797	12,413	7,878	63·5
1919	4,640	4,014	7,312	3,587	11,952	7,601	63·6
1920	4,719	4,133	7,477	3,516	12,196	7,649	62·7
1921	4,783	4,143	7,775	3,931	12,558	8,074	64·3
1922	5,031	4,360	7,990	4,308	13,021	8,668	66·6
1923	5,347	4,695	8,376	4,411	13,723	9,106	66·4
1924	5,673	4,856	8,199	4,332	13,872	9,188	66·2
1925	6,031	5,278	8,191	4,601	14,222	9,879	69·5
1926	6,327	5,658	8,455	4,940	14,782	10,598	71·7
1927	6,641	5,881	8,069	4,660	14,710	10,541	71·7
1928	6,795	6,043	8,223	4,823	15,018	10,866	72·4
1929	7,075	6,282	8,272	4,976	15,347	11,258	73·4
1930	7,302	6,476	8,441	5,103	15,743	11,579	73·6
1931	7,831	6,917	8,584	5,314	16,415	12,231	74·5
1932	8,213	7,400	8,950	5,707	17,163	13,107	76·4

Recent Economic Progress of the Indians.—The Indians of Canada have made remarkable progress in economic status during the past decade. When the fact is kept in mind that the Indians, unlike the whites, are not increasing rapidly in numbers, the significance of the figures which follow will be better appreciated. The area of the land under cultivation by Indians was 236,761 acres in 1932, as compared with 173,198 acres in 1916. Their live stock in 1931 included 37,255 horses and 50,198 cattle, as compared with 35,315 horses and 37,188 cattle in 1916. The total income of the Indians was $6,500,257 in 1931, as compared with $6,241,497 in 1916. Information showing the acreage and value of Indian lands in 1932, the crops raised in 1931, the live stock owned by Indians in 1931, the sources and values of the income of Indians in 1931, is given by provinces in Tables **9** to **12**.

9.—Acreage and Value of Indian Lands, by Provinces, 1932.

Province.	Total Acreage of Reserves.	Lands Cleared but not under Cultivation.	Lands under Cultivation.	Value of Lands.
	acres.	acres.	acres.	$
Prince Edward Island	1,668	424	318	20,000
Nova Scotia	19,195	2,605	789	103,075
New Brunswick	37,752	1,149	402	76,048
Quebec	193,941	19,715	11,607	1,523,700
Ontario	1,009,089	75,632	60,341	4,968,748
Manitoba	474,653	124,979	14,392	3,043,382
Saskatchewan	1,368,562	767,631	52,313	14,219,331
Alberta	1,280,437	868,763	68,880	17,723,566
British Columbia	744,259	277,587	27,675	12,880,990
Yukon and N.W.T	1,745	59	44	–
Totals	**5,131,301**	**2,138,544**	**236,761**	**54,558,840**

10.—Areas and Yields of Principal Field Crops of Indians, by Provinces, 1931.

Province.	Wheat.		Oats.		Other Grains.	
	acres.	bush.	acres.	bush.	acres.	bush.
Prince Edward Island	18	160	60	1,200	–	–
Nova Scotia	–	–	59	928	2	40
New Brunswick	–	–	109	1,665	15	200
Quebec	141	1,342	1,784	31,343	301	3,672
Ontario	1,087	15,684	11,659	286,871	2,738	56,433
Manitoba	3,002	18,277	2,450	22,035	1,899	8,738
Saskatchewan	17,644	199,387	11,740	116,815	2,265	9,079
Alberta	19,096	129,471	9,275	158,809	615	10,864
British Columbia	2,279	44,673	3,672	73,524	250	3,412
Yukon and N.W.T	–	–	–	–	–	–
Totals	**43,267**	**408,994**	**40,808**	**693,190**	**8,085**	**92,438**

Province.	Peas, Beans, etc.		Potatoes.		Other Roots.		Fodder, Hay Cultivated, Wild, etc.
	acres.	bush.	acres.	bush.	acres.	bush.	tons.
Prince Edward Island	–	–	25	1,200	1	250	90
Nova Scotia	15	131	101	4,123	22	695	482
New Brunswick	9	95	72	4,105	17	1,752	168
Quebec	127	640	849	17,107	55	2,338	4,358
Ontario	959	18,092	1,718	70,711	987	19,751	29,534
Manitoba	20	130	601	47,192	56	712	20,780
Saskatchewan	60	4,797	261	17,743	81	1,725	35,673
Alberta	–	–	273	16,072	39	2,246	19,931
British Columbia	489	10,963	1,912	178,627	493	30,043	22,747
Yukon and N.W.T	–	15	31	1,349	15	621	55
Totals	**1,679**	**34,863**	**5,843**	**358,229**	**1,766**	**60,133**	**133,818**

11.—Numbers of Farm Live Stock of Indians, with Total Value, by Provinces, 1931.

Province.	Horses.	Cattle.	Poultry.	Value of Live Stock and Poultry.
	No.	No.	No.	$
Prince Edward Island	14	28	150	1,500
Nova Scotia	46	201	615	11,975
New Brunswick	14	56	308	5,610
Quebec	691	3,525	9,954	115,703
Ontario	3,986	10,828	74,531	570,424
Manitoba	2,309	4,094	6,165	264,117
Saskatchewan	5,885	8,266	12,215	527,211
Alberta	13,904	10,201	5,293	528,648
British Columbia	10,405	12,993	28,675	795,209
Yukon and N.W.T	1	6	20	–
Totals	**37,255**	**50,198**	**137,926**	**2,820,397**

12.—Sources and Values of Income of Indians, by Provinces, 1931.

Province.	Value of— Farm Products, Including Hay.	Value of— Beef Sold or Used for Food.	Value of— Wages Earned.	Received from Land Rentals.	Earned by— Fishing.	Earned by— Hunting and Trapping.	Earned by— Other Industries.	Total Income of Indians.[1]
	$	$	$	$	$	$	$	$
P.E.I.	1,700	250	850	–	800	400	3,000	7,000
Nova Scotia	10,845	2,410	28,400	106	3,050	3,165	17,480	67,245
New Brunswick	7,585	155	20,200	75	4,700	1,910	4,600	42,730
Quebec	64,191	22,172	144,886	9,546	3,996	105,875	26,082	398,917
Ontario	361,594	31,290	565,380	25,158	219,565	226,489	198,583	2,029,166
Manitoba	125,992	25,569	108,005	921	63,895	159,915	48,108	614,197
Saskatchewan	231,600	57,184	67,564	3,308	22,255	147,181	35,681	717,050
Alberta	164,418	55,577	74,859	19,191	9,396	93,257	44,861	660,313
British Columbia	388,722	79,685	444,346	32,536	379,145	141,255	90,560	1,627,161
N.W. Territories	6,312	–	7,925	–	57,650	241,900	3,951	336,478
Totals	**1,362,959**	**274,292**	**1,462,415**	**90,839**	**764,452**	**1,121,347**	**472,906**	**6,500,257**

[1] Includes income received from timber and annuities earned as interest on Indian trust funds.

Subsection 2.—The Eskimos of Canada.[1]

The Eskimos are a littoral race, dwelling on the northern and northeastern mainland coasts and on islands in the Arctic archipelago and in Hudson bay. Though nomads, they never go far from the sea except to hunt caribou, the skin of which animal is required for winter clothing. They subsist largely on marine animals and fish. They inhabit chiefly the Northwest Territories and Yukon and the Ungava district of Quebec. According to the census of 1931 the total Eskimo population of Canada was 5,979, made up as follows: Northwest Territories 4,670, Yukon 85, Alberta 3, Manitoba 62, Quebec 1,159. The administrative care of those Eskimos outside of the organized provinces devolves upon the Department of the Interior, which has done much for them by providing medical attention, by setting aside wild-life preserves for the protection and conservation of game resources, by importation of reindeer, distribution of buffalo hides and caribou skins for bedding and clothing, and the establishment of permanent stations in the eastern, central, and western Arctic, from which regular patrols are made.

Section 5.—Pensions and other Provision for War Veterans.[2]

Pensions Division.—This Division is responsible for the administration of returned soldiers' affairs under the Pensions and National Health Act and the War Veterans' Allowance Act. It is also responsible, by the direction of the Board of Pension Commissioners for Canada, for all payments under the Pension Act.

The Annual Report for the fiscal year ended Mar. 31, 1932, shows a decrease in the number of ex-members of the Forces who received in-patient hospital treatment, the number being 14,267, as against 15,519 in 1930-31 and 12,939 in 1929-30. The Department maintains eight hospitals, situated in the following centres: Halifax, Saint John, Ste. Anne de Bellevue, Toronto, London, Winnipeg, Calgary and Vancouver. The sheltered employment workshops are still operated at Hamilton, Montreal and Halifax and one shop by the Red Cross Society at Victoria.

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[1] Revised by H. E. Hume, Chairman, Dominion Lands Board, Dominion Lands Administration, Department of the Interior, Ottawa.

[2] Revised by E. H. Scammell, Secretary, Pensions Division, Department of Pensions and National Health. See also 1930 Year Book, pp. 982-983.

The number of veterans' care cases showed an increase of 27, the total at the end of the fiscal year being 198. The issue of orthopædic and surgical appliances has been maintained with a slight increase. The number of pensioners who have been granted relief was 12,303 in 1931-32, as compared with 8,811 in 1930-31, 5,548 in 1929-30 and 4,647 in 1928-29. The expenditure in 1931-32 was $2,082,052, as compared with $907,010 in 1930-31, $517,947 in 1929-30 and $367,231 in 1928-29. During the year, 36 cases were taken on for vocational training and 6 for probational training.

The provision under which the Department assumes responsibility in respect of accidents sustained by pensioners of 25 p.c. and upwards while engaged in industry has been continued. During the fiscal year under review, the number of claims was 200, being 8 more than during the previous year. The expenditure was $49,878, as against $45,142 in 1930-31. This expenditure is largely governed by the number of fatal and serious accidents.

The following is a summary statement of the manner in which the funds appropriated by Parliament have been dealt with and also sets forth the costs of administration and the adjudication of pensions in amount and percentage.

COST OF ADMINISTRATION, FISCAL YEAR 1931-32.

Direct payments to men and dependants		$ 54,833,059.55
Payments for services to men and dependants		4,472,553.90
Capital expenditures		36,868.41
Payments to outside organizations		67,049.98
Recoverable expenditures		185,816.42
		$ 59,595,348.26
Revenue Insurance premiums	$ 1,643,456.53	
" Casual	186,744.54	1,830,201.07
		$ 61,425,549.33
Administration expenses		1,511,594.90
		$ 62,937,144.23
Expense of Board of Pension Commissioners, Veterans' Bureau, Pension Tribunal and Pension Appeal Court		1,058,126.24
		$ 63,995,270.47

DEPARTMENTAL ADMINISTRATIVE EXPENSE.

General departmental administration	$ 1,511,594.90
Percentage departmental administration	2·362 p.c.

ADJUDICATION OF PENSIONS.

Board of Pension Commissioners	$ 480,850.29	
Veterans' Bureau	205,894.85	
Pension Tribunal	329,908.15	
Pension Appeal Court	41,472.95	$ 1,058,126.24
Percentage—Adjudication of pensions		1·653 p.c.
Total administration and adjudication expense		$ 2,569,721.14
Percentage—All expense		4·015 p.c.

The Board of Pension Commissioners for Canada.—The Board of Pension Commissioners is responsible for the adjudication and award of pensions in respect of disabilities connected with military service and the award of pensions to the dependants of those who have died. It consists of three members and operates under the authority of the Pension Act. The following statements illustrate the growth of the activities of the Board of Pension Commissioners:—

The number of disability awards in force at Mar. 31, 1932, shows an increase of 9,209 as compared with those in force a year previous and of 18,882 as compared with the figures for 1930, being due, in the main, to the reinstatement, as provided by the 1930 Amendments to the Statute, of awards in cases in which final payments had been accepted. A decrease of 368 took place in the number of dependent pensions in force.

The number of medical examinations for pension purposes carried out during the fiscal year was 32,737, representing an increase of 1,529, which to a large extent was due to reinstatement of awards in final payment cases.

The total liability in respect of pensions under the Pension Act for the fiscal year ended Mar. 31, 1932, was $41,858,377, which is an increase of $1,646,651 over the liability for the preceding fiscal year.

13.—Pensions in Force as at Mar. 31, 1918-32.

Fiscal Year.	Dependants.		Disabilities.		Totals.	
	No. of Pensions.	Liability.	No. of Pensions.	Liability.	No. of Pensions.	Liability.
		$		$		$
1918	10,488	4,168,602	15,335	3,105,126	25,823	7,273,728
1919	16,753	9,593,056	42,932	7,470,729	59,685	17,063,785
1920	17,823	10,841,170	69,203	14,335,118	87,026	25,176,288
1921	19,209	12,954,141	51,452	18,230,697	70,661	31,184,838
1922	19,606	12,687,237	45,133	17,991,535	64,739	30,678,772
1923	19,794	12,279,621	43,263	18,142,145	63,057	30,421,766
1924	19,971	12,037,843	43,300	18,787,206	63,271	30,825,049
1925	20,015	11,804,825	44,598	19,816,380	64,613	31,621,205
1926	20,005	11,608,530	46,385	21,456,941	66,390	33,065,471
1927	19,999	11,419,276	48,027	22,811,373	68,026	34,230,649
1928	19,975	11,209,351	50,635	24,374,502	70,610	35,583,853
1929	20,002	11,090,158	54,620	26,095,150	74,622	37,185,308
1930	19,644	10,742,518	56,996	27,059,992	76,640	37,802,510
1931	19,676	10,985,518	66,669	29,226,208	86,345	40,211,726
1932	19,308	10,859,806	75,878	30,998,571	95,186	41,858,377

The following are the figures of disability and dependent pensions of beneficiaries under the Pension Act as at Mar. 31, 1932:—

Total number of disability pensioners	75,878
Total number of dependent pensioners—	
Widows	8,768
Others	10,540
Total	95,186

Number of persons in receipt of benefits under the Pension Act as at Mar. 31, 1932:—

	Number.	Total.
Disability pensioners	75,878	
Disability pensioners' wives	56,064	
Disability pensioners' children	98,161	
Disability pensioners' other relatives	1,902	
Disability pensioners (Widowers, Sec. 22-9 Pension Act)	298	232,303
Dependent pensioners	19,308	
Dependent pensioners' children	5,100	
Other relatives in addition to main dependants	1,678	26,086
SUPPLEMENTARY AWARDS.		
Disability—		
Militia Pension Act (Secs. 48 and 49 Pension Act)	28	
Supplementary to awards paid by Great Britain (Secs. 45 and 47 Pension Act)	271	
R.N.W.M. Police Supplementary (Sec. 48 Pension Act)	3	302
Dependent—		
Militia Pension Act (Secs. 48 and 49 Pension Act)	6	
Supplementary to awards paid by Great Britain (Secs. 46 and 47 Pension Act)	61	
Supplementary to awards paid by Belgium (Sec. 46 Pension Act)	1	
Supplementary to awards paid by France (Sec. 46 Pension Act)	32	
Supplementary to awards paid by Italy (Sec. 46 Pension Act)	2	102
Grand Total		258,793

Rates of pensions for all ranks were published in tables on pp. 960-962 of the 1925 Year Book, to which the reader is referred.

Pension Tribunal.—The Pension Tribunal, appointed in accordance with the Amendments to the Pension Act, passed in 1930, came into operation on Oct. 1, 1930, by the appointment of a chairman and eight members. During 1931, three temporary members were added.

During the year ended Mar. 31, 1932, the tribunal dealt with applications as follows:—

Old applications remaining to be completed from former fiscal year	149
New applications listed at hearings	4,619
Total	4,768
Decisions given favourable to the applicant	1,866
Decisions given unfavourable to the applicant	2,293
Applications withdrawn	108
Applications under consideration at 31-3-32	41
Applications standing adjourned	252
Applications standing postponed	204
Disagreements as to decision	4
Total	4,768

Preliminary hearings were also conducted in 188 applications.

Pension Appeal Court.—This Court was not fully constituted until the middle of January, 1931, so that sittings were not commenced until the first week in February. The following statement sets forth the activities of the Court between that date and Mar. 31, 1932.

Appeals heard to Mar. 31, 1932	1,672	
Decisions pending	12	
Decisions rendered to Mar. 31, 1932	1,660	
Appeals taken by Commission Counsel—		
Allowed on merits	386	
Allowed on jurisdiction	26	
Disallowed	268	
Remitted for re-hearing	118	798
Appeals taken by Applicant—		
Allowed on merits	10	
Allowed on question of jurisdiction of Tribunal to limit date from which pension should be paid	16	
Allowed on question of jurisdiction of Tribunal to entertain application	16	
Disallowed	806	
Remitted for re-hearing	14	862
		1,660
Appeals filed by commission counsel to Mar. 31, 1932	1,890	
Withdrawn	68	
Net		1,822
Appeals filed by applicant to Mar. 31, 1932	1,379	
Withdrawn	12	
Net		1,367
Total net		3,189

Veterans' Bureau.—Pursuant to legislation passed in 1930, a Veterans' Bureau was organized as a branch of the Department and came into active operation on Oct. 1, 1930. The duties of the Bureau were set forth on p. 945 of the Canada Year Book, 1932. Briefly stated, the Bureau was created and is operated to assist applicants for pension in the preparation and presentation of their cases. There is a Chief Pensions Advocate with his staff at Ottawa, and Pensions Advocates have their offices in all the principal cities of Canada.

War Veterans' Allowances.—A synopsis of the War Veterans' Allowance Act, which came into force on Sept. 1, 1930, appeared on p. 946 of the Canada Year Book, 1932. The following statistics show the activities of the War Veterans' Allowance Committee for the fiscal year ended Mar. 31, 1932.

NUMBER OF CASES HANDLED DURING YEAR.

Number of new applications dealt with	4,442
Number of cases receiving allowance reviewed	1,105
Total number of cases dealt with during year	5,547

NUMBER OF RECIPIENTS.

	Number of Cases.	Annual Liability.
Veterans' allowance payments in force Mar. 31, 1931	2,219	$ 738,485
Awards during fiscal year ending Mar. 31, 1932	2,034	662,101
Total	4,253	1,400,586
Cancellations, account of death, etc	428	143,252
Payments in force Mar. 31, 1932	3,825	$ 1,257,334

ANALYSIS OF AWARDS MADE FROM SEPTEMBER, 1930, TO MAR. 31, 1932.

Approved over sixty years of age	2,360	
Cancelled by death, etc	185	2,175
Approved under sixty years of age	1,930	
Cancelled by death, etc	280	1,650
Total in receipt of allowance on Mar. 31, 1932		3,825

Returned Soldiers' Insurance.—The Returned Soldiers' Insurance Act of 1920 was placed under the jurisdiction of the Board of Pension Commissioners for Canada. The Board confines itself, however, to the issue of policies and to the supervision and adjudication of claims. All collections and payments are made through the Department. No applications under the Statute could be received after Sept. 1, 1923, but its operation has been extended from time to time and applications may now be received until Aug. 31, 1933.

During the fiscal year ended Mar. 31, 1932, 1,463 applications for policies were received, of which 1,351 were accepted and 92 refused. The number of policies issued, including some in which applications had been accepted prior to the commencement of the period under review, was 1,373.

The total number of policies in force on Mar. 31, 1932, was 28,426 representing an insurance of $62,680,341. During the fiscal year the premium income was $1,643,457, interest was $379,797, making a total of $2,023,254. Expenditure during the year, in respect of death claims, cancelled insurance and surrendered policies, amounted to $919,514. The total number of death claims to Mar. 31, 1932, was 2,759, amounting to $7,278,184. The balance on hand as at Mar. 31, 1932, was $10,352,976.

Section 6.—Soldier and General Land Settlement.[1]

Soldier settlers and other settlers under the jurisdiction of the Soldier Settlement of Canada have, in common with Canadian farmers generally, been confronted with adverse agricultural conditions during the year under review. In view of this situation the Department has continued its general policy of reasonable leniency to all settlers who are making an honest effort to handle their farms efficiently and to live within their means. The fact that no settler has been dispossessed of his farm during the past two years, by action of the Department, because of inability to meet his payments, is the best evidence of adherence to this general policy.

At the present time the Soldier Settlement of Canada is administering 22,986 farm properties, made up as follows: soldier settlers, 11,535; civilian settlers, 5,475; British families, 2,274; reverted farms, 3,702; total, 22,986.

The total number of soldier settlers established with loans was 24,715. Gross charges, including interest, to soldier settlers' and British Family settlers' accounts amounted to $148,438,358.68 at the close of 1932. Reduction of this amount to the present net investment of $63,862,224.68 is accounted for as follows:

Repayments by settlers (principal and interest)	$ 50,868,695·17
Remedial legislative reductions	21,703,845·77
Losses on security sold	12,003,593·06
Total	$ 84,576,134·00

In addition to the $21,703,845.77 actually written off soldier settlers' accounts these settlers have benefited to the extent of $10,269,108.87 in interest not charged to their accounts, in accordance with legislation passed in 1922.

During the past three years the annual administration costs of soldier and general land settlement have been reduced by $557,121.86. The administrative expenditure for the fiscal year 1929-30 was $1,362,121.86, while the administration cost for the fiscal year ended Mar. 31, 1933, is estimated at $805,000. This reduction in annual administration cost is due to complete re-organization of the Department, including Head Office, district offices and field staff, resulting in the elimination of three district offices; termination of the services of 158 former members of the staff, including 16 senior executive officers; elimination of 43 motor cars and curtailment in travelling and other expenses. The annual cost of soldier land settlement is now $567,000, which is less than 1 p.c. of the net loan investment.

Of the settlers who have retired from the scheme 4,952 have repaid their loans in full (2,385 by cash repayment, 2,567 by sale of properties).

In 1932 the Department leased 2,065 properties to local farmers and effected the sale of 456 properties.

Under the British Family Scheme 3,346 families were accepted for settlement. Of these 175 withdrew from the scheme before receiving advances, and 1,165 withdrew after contracting loans, making a total of 1,340 withdrawals. There are now 1,981 families operating farms under the Three Thousand Family Scheme. Thirteen families have repaid their loans; twelve families have not yet received loans.

Under the New Brunswick British Family Scheme 359 families were accepted for settlement. Of these 293 are still on the land; 62 have withdrawn, 57 after contracting loans, five before contracting loans; four have not yet received loans.

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[1] Revised by C. W. Cavers, Soldier Settlement of Canada. Figures are as at Dec. 31, 1932.

As a result of the Back-to-the-Land Movement inaugurated by the Minister in 1930, the Soldier Settlement of Canada has, since October of that year, placed 9,514 single men in farm work and settled 1,279 families on vacant soldier settlement farms, exclusive of those placed by the railways, bringing the total by railways and Department in co-operation up to 22,803 single men and 10,486 families. Under the Relief Land Settlement Plan instituted by the Dominion Government in 1932, 1,706 families have been settled on the land under Dominion-Provincial agreements. On the basis of five to a family a total of 84,763 individuals has been absorbed into agriculture.

The Soldier Settlement of Canada is equipped to deal with certain phases of the work of several other departments and is rendering assistance to the War Veterans' Allowance Committee and the Board of Pension Commissioners, and to the Department of the Interior. The work involved in this connection is with respect to applications for relief by unemployed pensioners, with respect to special pension cases, pension and war veterans' allowance applications arising in rural districts, together with reports on applications for patent. From Sept. 1, 1930, to Dec. 31, 1932, 12,605 investigations of the type referred to have been carried out.

Section 7.—Department of the Secretary of State.[1]

The Department of the Secretary of State was constituted in its present form in 1873, through the merging of the previously-existing offices of the Secretaries of State for Canada and for the provinces. The Secretary of State is the official mouthpiece of the Government as well as the medium of communication between the Dominion and Provincial Governments, all correspondence between the Governments being conducted by him with the Lieutenant-Governors. He is also the custodian of the Great Seal of Canada and the Privy Seal as well as the channel by which the general public may approach the Crown.

The Secretary of State is also the Registrar-General, registering all proclamations, commissions, licences, warrants, writs, and other instruments issued under the Great Seal and the Privy Seal. He is further charged with the administration of the Boards of Trade Act, the Companies Act, the Canada Temperance Act, the Copyright Act, the Naturalization Act, the Patent Act, the Trade Unions Act, the Ticket of Leave Act, the Unfair Competition Act. The following information on these subjects has been secured in the course of administration.

Charters of Incorporation.—The number of companies incorporated under the Companies Act and amending Acts during the fiscal year 1931-32 was 760 with a total capitalization of $294,770,312. Supplementary letters patent were granted during the year to 197 companies, 43 of which increased their capital stock by the aggregate amount of $27,981,750; 44 decreased their capital stock by $52,773,617; the remaining 110 were granted supplementary letters patent for various purposes, such as changing names, extending powers, etc. The total capitalization of new companies plus the increase of capital of existing companies amounted to $322,751-062.

In Table **14** will be found the number and capitalization of companies incorporated during the years 1900-32.

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[1] Revised by Thomas Mulvey, B.A., K.C., Under-Secretary of State, Department of the Secretary of State.

14.—Number and Capitalization of Companies Incorporated under the Companies Act and Amending Acts, calendar years 1900-07, and fiscal years ended Mar. 31, 1908-32.

Year.	New Companies.		Old Companies.		Gross Increase in Capitalization.	Old Companies.		Net Increase of Capitalization.
	Number.	Capitalization.	Number.	Increase in Capital.		Number.	Decrease in Capital.	
		$		$	$		$	$
1900	53	9,558,900	–	3,351,000	12,909,900	–	–	12,909.900
1901	55	7,662,552	–	3,420,000	11,082,552	–	–	11,082,552
1902	126	51,182,850	–	5,055,000	56,237,850	–	–	56,237,850
1903	187	83,405,340	–	5,854,520	89,259,340	–	–	89,259,340
1904	206	80,597,752	–	3,366,000	83,963,752	–	–	83,963,752
1905	293	99,910,900	–	9,685,000	109,595,900	–	–	109,595,900
1906	374	180,173,075	–	32,403,000	212,576,075	–	–	212,576,075
1907	378	132,686,300	–	19,091,900	151,778,200	–	–	151,778,200
1908 (3 mos.)	64	13,299,000	–	865,000	14,164,000	–	–	14,164,000
1909	366	121,624,875	–	72,293,000	193,917,875	–	–	193,917,875
1910	420	301,788,300	44	46,589,500	348,377,800	4	670,600	347,707,200
1911	454	458,415,800	45	24,715,600	483,131,400	4	10,650,000	472,481,400
1912	575	447,626,999	44	42,939,000	490,565,999	7	17,880,800	472,685,199
1913	835	625,212,300	54	55,549,900	680,962,200	5	11,861,381	669,100,819
1914	647	361,708,567	61	63,599,003	425,307,570	3	3,290,000	422,017,570
1915	461	208,283,633	34	26,650,000	234,933,633	4	6,840,000	228,093,633
1916	534	157,342,800	28	68,996,000	226,338,800	11	4,811,700	221,527,100
1917	606	207,967,810	36	26,540,000	234,507,810	3	5,050,000	229,457,810
1918	574	335,982,400	41	69,321,400	405,303,800	4	1,884,300	403,419,500
1919	512	214,326,000	69	67,583,625	281,909,625	11	2,115,985	279,793,640
1920	991	603,210,850	88	85,187,750	688,398,600	10	19,530,000	668,868,600
1921	852	752,062,683	135	79,803,000	831,865,683	17	7,698,300	824,167,383
1922	875	351,555,900	43	18,275,000	369,830,900	13	5,121,450	364,709,450
1923	752	314,603,050	45	46,108,500	360,711,550	30	10,751,123	349,960,427
1924	604	204,646,283	58	15,352,755	219,999,038	27	57,944,410	162,054,628
1925	663	231,044,800	47	15,549,573	246,594,373	28	43,863,633	202,730,740
1926	801	353,342,800	48	33,303,500	386,646,300	47	43,797,780	342,848,520
1927	836	692,540,900	70	33,524,000	726,064,900	40	16,905,045	709,159,855
1928	1,102	538,595,570	82	179,167,100	717,762,670	31	37,123,580	680,639,050
1929	1,202	1,406,006,340	128	412,396,320	1,818,402,660	40	48,005,533	1,770,397,127
1930	1,280	1,346,138,367	127	293,496,800	1,639,635,167	35	46,955,000	1,592,680,167
1931	898	562,613,797	75	153,524,400	716,138,197	39	50,604,555	665,533,642
1932	760	64,686,412	178	3,871,000	322,751,062	21	28,822,352	293,928,710

Naturalizations.—The naturalizations effected under the Naturalization Act (R.S.C., 1906, c. 77) for the calendar years 1908-17 inclusive, were given on p. 594 of the Year Book for 1919. Since Jan. 1, 1918, the only method of obtaining naturalization has been under what is known as the "Imperial" Naturalization Act, which came into force on Jan. 1, 1915. This Act was known under the title of the Naturalization Act, 1914, until July 7, 1919, when it was repealed and the Naturalization Act, 1919, came into force. On July 1, 1920, the Naturalization Act, 1919, was repealed, and the Naturalization Act, 1914, was revived and amended under the title of the Naturalization Acts, 1914 and 1920. By an amendment passed by Parliament in 1923, the restriction by which persons of alien enemy birth were ineligible to receive certificates of naturalization for a period of 10 years after the termination of the War was removed, and at the present time any alien may apply for naturalization, regardless of his nationality. All these Acts have been consolidated in R.S.C., 1927, c. 138. Since Jan. 15, 1932, women British subjects on marrying aliens may by declaration retain their British nationality, if they have not by marriage acquired their husband's nationality, and the wives of aliens no longer become British subjects through their husbands' naturalization. They must apply to the Secretary of State.

Table **15** shows the number of naturalization certificates issued to single persons or heads of families under these Acts during the calendar years from 1923 to 1931. The total number of persons naturalized during the fiscal year ended Mar. 31, 1932, was 32,519, including (except as stated above) the wives and minor children of those to whom naturalization certificates were issued.

15.—Naturalizations in Canada, by Principal Nationalities, under the Naturalization Act, calendar years 1923-31.

Nationality.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
Afghans	–	–	–	–	–	–	–	–	1
Albanians	5	3	12	4	8	11	9	4	4
Arabians	–	–	–	–	–	1	–	–	–
Argentinians	1	–	1	–	2	2	1	4	3
Austrians	606	1,108	1,021	1,195	925	728	890	1,004	1,050
Austrians (Bohemian)	–	–	–	1	–	–	–	–	–
Austro-Hungarians	10	15	9	4	7	2	5	4	5
Austrians (Serbian)	–	–	–	1	–	–	–	–	–
Austrians (Ukrainian)	–	1	–	–	–	–	–	–	–
Belgians	129	157	192	204	157	169	264	274	257
Bolivians	–	–	–	–	–	2	–	–	–
Brazilians	4	–	1	2	–	–	3	1	–
Bulgarians	32	74	76	58	59	46	64	41	37
Chilians	–	–	1	1	–	–	–	2	1
Chinese	10	60	50	32	29	28	24	23	22
Colombians	–	–	–	–	1	–	–	–	–
Cubans	–	–	–	–	–	–	–	2	1
Czechoslovaks	64	115	60	47	38	57	287	287	646
Danes	93	79	108	105	116	132	208	217	249
Danzigers	–	–	–	–	1	1	–	1	2
Dutch	51	85	67	75	79	64	112	143	203
Egyptians	1	2	–	2	1	–	1	1	–
Estonians	–	–	–	–	2	8	9	10	14
Finns	74	152	184	119	128	133	288	276	319
French	96	105	107	140	123	98	118	119	154
Germans	144	346	246	229	183	171	288	420	449
Greeks	268	384	292	167	161	153	173	180	97
Greeks (Albanian)	–	–	–	–	1	–	–	–	–
Greeks (Turk)	–	–	1	–	–	–	–	–	–
Hungarians	24	112	71	69	37	45	184	396	780
Icelanders	–	5	10	15	15	17	12	17	30
Italians	886	1,366	1,258	1,589	1,270	1,146	1,739	1,186	1,183
Italians (Greek)	–	–	–	1	–	–	–	–	–
Japanese	29	92	53	88	17	35	18	33	7
Latvians	–	–	–	–	17	30	25	25	29
Lithuanians	–	–	–	1	46	55	55	46	130
Luxemburgers	5	–	5	6	2	5	4	2	4
Macedonians	–	–	–	–	–	–	–	1	–
Mexicans	1	–	–	–	1	–	1	–	2
Montenegrins	1	1	2	2	2	1	2	3	4
Mount Lebanon[2]	–	–	–	–	–	5	7	2	2
Norwegians	151	207	183	192	202	197	424	381	412
Palestinians	5	2	–	3	2	4	6	6	4
Persians	1	4	5	3	2	3	1	4	1
Persians (Armenian)	–	–	1	–	–	–	–	–	–
Peruvians	–	–	–	–	–	–	–	1	–
Poles	654	926	749	1,339	1,189	962	1,295	1,218	2,623
Poles (Ukrainian)	12	–	–	–	–	–	–	–	–
Portuguese	–	1	1	1	1	1	1	3	–
Roumanians	475	620	561	626	570	437	671	588	614
Russians	1,206	1,240	989	1,119	981	858	1,687	1,940	2,527
Serb-Croat-Slovenes	80	119	117	116	80	78	295	404	646
Spaniards	5	10	8	12	5	10	7	8	8
Subjects of Allied Powers	188	–	–	–	–	–	–	–	–
Swedes	226	284	262	274	258	242	295	310	442
Swiss	43	42	48	31	9	13	26	38	27
Syrians	–	–	–	–	–	–	–	–	53
Turkestan	–	–	–	–	–	1	–	–	–
Turks	8	22	25	10	17	24	24	24	20
Turks (Armenian)	79	69	35	35	22	23	46	58	25
Turks (Bulgarian)	–	–	1	–	–	–	–	–	–
Turks (Greek)	7	2	12	11	4	1	3	1	1
Turks (Mesopotamian)	2	–	1	–	–	–	–	–	–
Turks (Palestinian)	–	1	1	–	–	–	–	–	–
Turks (Syrian)	125	137	118	128	93	80	87	91	10
U.S. Citizens	989	888	927	1,070	963	939	1,073	1,104	1,652
Venezuelans	1	–	–	–	–	–	1	–	–
Section 6[1]	2	2	1	3	2	–	1	2	–
Nationality undetermined	–	4	1	–	–	1	–	–	1
No nationality	3	1	–	–	–	–	–	1	1
Totals	**6,795**	**8,843**	**7,873**	**9,130**	**7,828**	**7,019**	**10,734**	**10,906**	**14,752**

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[1] Under Section 6 of the Naturalization Act the Secretary of State is authorized, in his discretion, to grant a special certificate of naturalization to any person with regard to whose nationality as a British subject a doubt exists. [2] Citizens of the Lebanese Republic.

Canada Temperance Act.—Under Parts I and II of this Act, provision is made for the prohibition of the sale of intoxicating liquors in counties and cities. The last vote taken under these parts was in the County of Compton, Quebec, on April 28, 1930, in response to a petition for the repeal of the Act in that county. The vote resulted in favour of the repeal, which became effective on June 14, 1930. Part III of the Act relates to penalties and prosecutions, Part IV to the prohibition of the importation and exportation of intoxicating liquors into and from the provinces, while Part V enacts provisions in aid of provincial legislation for the control of the liquor traffic.

Section 8.—The Royal Canadian Mounted Police.

The R.C.M. Police is a constabulary maintained by the Dominion Government. When organized in 1873 it was known as the North West Mounted Police; in 1904, its name was changed to the Royal North West Mounted Police and in 1920, to the Royal Canadian Mounted Police.

The Force is controlled and administered by a Minister of the Crown (at present, the Minister of Justice) and may be employed anywhere in Canada.

It is primarily responsible for the maintenance of law and order in Yukon, the Arctic regions, the unorganized Northwest Territories and, for a variety of services, for the Dominion Government in all provinces of the Dominion. A large number of the Dominion Departments utilize its service in investigations and in administrative work.

Amongst the many services rendered for the Dominion Government, the repression of the traffic in noxious drugs, the protection of Government buildings and dockyards, the enforcement of Dominion laws and the duties of the Preventive Service for the Department of National Revenue may be mentioned.

Under the R.C.M. Police Act, any province may enter into an agreement with the Dominion Government for the services of the R.C.M. Police to enforce provincial laws upon payment for its services.

In addition to the Dominion duties referred to, the Force at the present time has agreements with the Provinces of Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan and Alberta, whereby the R.C.M. Police is responsible for the enforcement of the Criminal Code and Provincial Statutes in those provinces.

The Force is divided into 14 divisions of varying strength distributed over the entire country. The term of engagement is 5 years for recruits with re-enlistment for 1 year or 3 years. The officers are commissioned by the Crown.

Recruits are trained at Regina, Saskatchewan. The course of training covers six months and consists of drill, both mounted and foot, and general instructions in police duties. The Force is distributed from Halifax to Vancouver and from Bache Peninsula, on Ellesmere island, in the far north, to the International Boundary between Canada and the United States.

The Force, which is commanded by a Commissioner whose Headquarters are at Ottawa, Ontario, had a strength of 2,348 on Sept. 30, 1932, including masters and seamen employed with the Preventive Service for the prevention of smuggling at sea, distributed as follows:—

16.—Strength and Distribution of the Royal Canadian Mounted Police as at Sept. 30, 1932.

Place.	Commissioner.	Deputy Commissioner.	Asst. Commissioners.	Superintendents.	Inspectors.	Surgeons.	Asst. Vet. Surgeons.	Staff Sergeants.	Sergeants.	Corporals.	Constables.	Special Constables.	Total Personnel.	Saddle Horses.	Team.	Total Horses.	Dogs.
P.E.I.	–	–	–	–	1	–	–	1	2	3	15	11	33	–	–	–	–
N.S.	–	–	–	1	7	–	–	4	17	28	122	162	341	–	–	–	–
N.B.	–	–	1	1	6	–	–	–	9	19	75	16	127	–	–	–	–
Que.	–	–	–	1	4	–	–	2	6	21	111	11	156	–	–	–	107
Eastern Ont.	1	1	2	3	9	–	–	12	33	46	280	14	401	35	3	38	17
Western Ont.	–	–	–	1	3	–	–	2	7	12	51	2	78	3	2	5	–
Man.	–	–	1	1	6	–	–	7	17	18	147	11	208	15	–	15	64
Sask.	–	–	1	1	12	1	1	9	26	44	269	43	407	75	15	90	36
Alta. "K" Division	–	–	1	2	9	–	–	4	27	37	182	37	299	73	–	73	–
N.W.T. "G" Division.	–	–	1	–	4	–	–	1	3	11	60	22	102	–	–	–	200
B.C.	–	–	–	1	4	–	–	3	11	15	101	12	147	38	–	38	–
Yukon	–	–	–	1	2	–	–	1	4	7	29	5	49	2	2	4	36
Totals	**1**	**1**	**7**	**13**	**67**	**1**	**1**	**46**	**162**	**261**	**1,442**	**346**	**2,348**	**241**	**22**	**263**	**460**

Section 9.—The Civil Service of Canada.

Organization.[1]—Prior to 1882, appointments to the Civil Service were made directly by the Government. In that year, a Board of Civil Service Examiners was appointed to examine candidates and issue certificates of qualification to those successful at examinations. Appointments, however, were still made by the Government of the day.

The Royal Commission of 1907, appointed to inquire into the Civil Service Act and its operation, reported in favour of the creation of a Civil Service Commission. In 1908 this body was appointed; it consisted of two members appointed by the Governor in Council and holding office during good behaviour, but removable by the Governor General on address of the Senate and House of Commons. The Civil Service was classified into three divisions under the Deputy Heads of Departments, each division consisting of two subdivisions, each of these having its scale of salaries. The Commission was charged with the organization of and appointments to the Inside Service (at Ottawa), certain appointments to be made after open competition and others after qualifying tests, also with holding qualifying examinations for the Outside Service (the Service apart from Ottawa) to obtain lists from which selections could be made by the various Departments. All British subjects between 18 and 35 years of age who had resided in Canada for three years were eligible to try these examinations.

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[1] Revised by Wm. Foran, Secretary, Civil Service Commission, Ottawa.

In 1918 a third member of the Civil Service Commission was appointed, and by the Civil Service Act of that year the principle of appointment after open competition was applied to the Outside as well as the Inside Service. The Act also provided for the organization by the Commission of the various Government Departments, for a classification of all positions in the Service on a duties basis, for the establishing of new rates of compensation, and for the principle of promotion by merit whenever consistent with the best interests of the Service. Provision was also made for preference, in the matter of appointment to the Service, to be given to qualified applicants who had served in the Great War.

Civil Service Statistics.[1]—From April, 1924, a monthly return of personnel and salaries has been made by each Department to the Dominion Bureau of Statistics, according to a plan that ensures comparability between Departments and continuity in point of time. The institution of this system was preceded by an investigation back to 1912, the summary results of which are presented in Table **17.**

During the war years, as will be seen from Table **17,** the number of employees increased very rapidly, as a result of the enlargement of the functions of government and the imposition of new taxes, necessitating additional officials as collectors. Such new services as the Department of Pensions and National Health and the Soldier Settlement Board were also created. The maximum was reached in January, 1920, when 47,133 persons were employed; this number has since decreased to 43,778 in January, 1932. It may be added that, out of 44,002 in March, 1932, 1,200 in the Income Tax Branch and 2,750 in the Department of Pensions and National Health, or 3,950 in all, were engaged in services of outstanding importance which had no existence before the War. Further, an additional 11,676 persons were, in March, 1932, employed in the Post Office Department, performing services of an industrial rather than of a governmental type, and receiving their salaries out of the payments of the public for services immediately rendered, rather than out of taxation. This postal service alone accounted for $2,801,137 of the $7,520,833 paid in salaries in March, 1932, or 37·25 p.c. of the total.

The statistics of numbers of employees and of salaries, now being secured monthly, are more comprehensive than those previously published, as a result of the inclusion of various classes of employees, largely "part-time", "seasonal" and "fees of office" employees, who were not included in the report published in 1925. These employees are largely in the Departments of Marine, Fisheries and Public Works. There remain, however, many persons in the "non-enumerated classes" whose numbers cannot be supplied monthly by the departmental officials but whose compensation is included in the monthly figures of expenditure on personnel, as shown in Table **18.**

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[1] Revised by Col. J. R. Munro, Chief of the Finance Branch of the Bureau of Statistics, Ottawa.

17.—Summary of Civil Service Employees (Permanent and Temporary) of the Government of Canada, together with Total Salaries, in the month of January of the years 1912-32, inclusive.

Year.	Employees.	Salaries.	Bonus.	Salaries and Bonus.
	No.	$	$	$
1912	20,016	1,519,778	16,413	1,536,190
1913	22,621	1,780,703	22,569	1,803,272
1914	25,107	1,960,238	27,971	1,988,209
1915	28,010	2,268,700	32,167	2,300,867
1916	29,219	2,400,068	31,431	2,431,499
1917	32,435	2,673,767	29,167	2,702,934
1918	38,369	3,147,461	94,321	3,241,782
1919	41,825	3,552,686	557,882	4,110,568
1920	47,133	4,423,157	965,538	5,388,695
1921	41,957	4,414,669	861,973	5,276,642
1922	41,094	4,369,509	616,105	4,985,614
1923	38,992	4,268,357	463,470	4,731,827
1924	38,062	4,297,467	449,228	4,746,695
1925[1]	38,645	4,473,470	166,461	4,639,931
1926[1]	39,097	4,699,076	–	4,699,076
1927[1]	39,440	4,786,615	–	4,786,615
1928[1]	40,740	5,161,558	–	5,161,558
1929[1]	42,038	5,428,058	–	5,428,058
1930[1]	43,525	5,543,749	–	5,543,749
1931[1]	45,167	5,757,554	–	5,757,554
1932[1]	43,778	5,652,132	–	5,652,132

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[1] Figures for January, 1925-32 are not comparable with those for preceding Januaries, because monthly records now being published include various classes of employees not included in the historical record for the 13 years 1912–24. In Table **21** will be found comparable figures of employees in the various Departments in March, 1931, and March, 1932.

Table **18**, which gives statistics by Departments, with a further classification by principal branches where such are recorded, is included to give comparable figures for the latest months. In the month of March, 1932, the total number of employees in the enumerated classes was 44,002, and the total expenditure in wages and salaries for all classes of employees was $7,520,834, as compared with 45,581 employees and $7,895,591 respectively in March, 1931.

18.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1931, and March, 1932.

Department.	March, 1931.		March, 1932.	
	No.	Expenditure.	No.	Expenditure.
		$		$
1. Agriculture—				
Main Department	1,152	162,125	1,259	173,190
Experimental Farms	482	123,085	507	139,905
Health of Animals	613	105,859	619	107,249
Totals, Agriculture	2,247	391,069	2,385	420,344
2. Archives	83	13,363	81	13,176
3. Auditor-General	211	33,314	220	33,811
4. Civil Service Commission[1]	176	22,746[2]	155	21,855
5. Chief Electoral Officer	7	958	4	568
6. External Affairs—				
Main Department	77	11,542[3]	76	11,935[3]
The High Commissioner's Office	37	5,763[3]	38	6,098[3]
Canadian Legation, Washington	16	4,531[3]	16	3,929[3]
Canadian Legation, Paris	13	2,351[3]	14	2,541[3]
The League of Nations	5	1,426[3]	5	1,514[3]
Canadian Legation, Tokyo, Japan	7	2,036[3]	11	2,926[3]
Totals, External Affairs	155	27,649[3]	160	28,943[3]

For footnotes, see end of table, p. 1061.

18.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1931, and March, 1932—continued.

Department.	March, 1931.		March, 1932.	
	No.	Expenditure.	No.	Expenditure.
		$		$
7. Finance	405	48,440[4]	461	53,653
8. Royal Canadian Mint	–	–	75	12,818
9. Fisheries	382	104,181	362	116,238
10. Governor General's Secretary[5]	10	2,875	10	2,805
11. House of Commons—				
Clerk of the House	289	42,246	236	45,782
Sergeant-at-Arms	310	22,001	221	20,379
Totals, House of Commons	599	64,247	457	66,161
12. Immigration and Colonization	883	115,444	781	105,956
13. Indian Affairs—				
Main Department	696	66,019	698	67,844
Educational Branch	378	23,645	379	23,939
Totals, Indian Affairs	1,074	89,664	1,077	91,783
14. Insurance	40	7,563	41	7,914
Fire Prevention Branch	2	535	2	540
15. Interior	2,037	320,592	1,125	193,577
16. International Joint Commission	5	2,393	5	2,393
17. Justice—				
Main Department	46	9,520	43	8,633
Clemency Branch	12	2,178	15	2,410
Purchasing Agent's Office	7	990	6	895
Penitentiaries	722	91,498	777	99,307
Supreme Court	22	4,008	23	4,133
Exchequer Court	10	1,947	10	1,987
Totals, Justice	819	110,141	874	117,365
18. Labour—				
Main Department	118	18,932	116	19,641
Annuities	22	2,943	18	2,720
Technical Education	3	437	2	377
Dominion Unemployment Relief	–	–	61	10,303
Totals, Labour	143	22,312	197	33,041
19. Library of Parliament	25	4,456	25	4,870
20. Marine—				
Main Department	3,672	509,158	3,189	367,363
Meteorological Branch	570	19,782	578	23,145
Totals, Marine	4,242	528,940	3,767	390,508
21. Mines	532[6]	150,912	394	72,838
22. National Defence—				
General Defence Administration	274	39,310	274	40,468
Militia Services	596	54,396	592	54,030
Naval Services	159	35,351	156	39,486
Air Services	165	18,558	164	18,615
Military Topographic Surveys	27	5,147	28	5,322
Royal Military College	78	10,477	79	10,719
Dominion Arsenal, Quebec, inc. Ammun, Inspection.	59	27,097	59	27,730
Totals, National Defence	1,358	190,336	1,352	196,370
23. National Revenue	5,153	746,265	5,060	756,903
Income Tax Division	1,156	158,986	1,200	167,374
Totals, National Revenue	6,309	905,251	6,260	924,277
24. Pensions and National Health—				
Pensions	2,222	266,829	2,125	261,876
Board of Pension Commissioners	199	33,924	204	34,554
Health	340	52,849	325	58,617
Pensions Appeal Court	11	3,103	10	3,138
Pensions Tribunal	76	13,371	86	16,763
Totals, Pensions and National Health	2,848	370,076	2,750	374,948

For footnotes, see end of table, p. 1061.

18.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures of Salaries and Wages of All Employees ("Non-Enumerated Classes" Included), March, 1931, and March, 1932—concluded.

Department.	March, 1931.		March, 1932.	
	No.	Expenditure.	No.	Expenditure.
		$		$
25. Post Office—				
Civil Government	944	123,510	931	124,665
Outside Service	11,017	2,777,003	10,745	2,676,472
Totals, Post Office	11,961	2,900,513	11,676	2,801,137
26. **Privy Council**	18	4,080	18	3,980
27. Public Printing and Stationery	721	111,096	709	114,356
28. Public Works—				
Civil Government	338	59,066	326	57,355
Outside Service	3,183	367,651	3,209	328,156
Government Telegraph Service	529	40,887	415	34,066
Totals, Public Works	4,050	467,604	3,950	419,577
29. **Railways and Canals**	1,330	306,428	1,095	247,680
Board of Railway Commissioners	111	23,611	108	25,103
30. Royal Canadian Mounted Police	78	105,607	88	133,633
31. Secretary of State	114	14,929	113	14,894
Patents and Copyrights	106	15,303	101	14,785
32. Senate	126	16,534	123	16,292
33. Soldiers' Settlement Board	504	83,904	369	58,345
34. Trade and Commerce—				
Headquarters and Miscellaneous Branches	160	29,382	178	33,676
Board of Grain Commissioners	861	137,192	882	136,155
Dominion Bureau of Statistics	318	36,129	1,035	99,088
Weights and Measures	125	19,647	124	19,549
Electricity and Gas	99	16,860	98	16,995
Commercial Intelligence Service	91	44,592	99	44,936
Motion Picture Bureau	24	3,610	26	3,960
Exhibitions	30	9,941	23	7,908
Canadian Government Elevators	162	21,172	167	22,033
Totals, Trade and Commerce	1,870	318,525	2,632	384,300
Grand Totals	**45,581**	**7,895,591**	**44,002**	**7,520,834**

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[1] Including Commissioners and their salaries. [2] Refund of $297 has been deducted. [3] Including living allowance. [4] Refund of $1,440 has been deducted. [5] Salaries of A.D.C.'s are included, but not their number. [6] The actual number of employees was 402. The salaries of 130 seasonal temporary employees engaged for varying periods throughout the year were charged to this month.

Section 10.—Harbour Commissions.

The administration of the Harbour Commissions continues to be as outlined at p. 1013 of the Year Book for 1930. The recommendations in the report of Sir Alexander Gibb and Partners, referred to in last year's Year Book, which, if put into effect, will call for a very considerable change in the present method of administering the harbours that are placed under the Commission form of administration, are still under study by the Government but no definite action has as yet been announced as a result of this study.

Section 11.—Race Track Betting.

By an amendment to Section 235 of the Criminal Code, passed in 1920, the supervision of race track betting, under the pari-mutuel system, was placed in the hands of the Minister of Agriculture. The actual supervision is carried out by officers of the Royal Canadian Mounted Police and operated for the first time during the racing season of 1921. Statistics are available from the year 1924 and are shown in Table **19** for the Dominion as a whole, while Table **20** shows the operations by provinces for the fiscal year ended Mar. 31, 1931.

19.—Race Track Betting in Canada, 1924-31.

Fiscal Year.	Number of Associations.	Number of Days Racing.	Amounts Wagered.	Pari-Mutuel Receipts Retained.	Prize Money.
			$	$	$
1924	30	354	52,600,633	3,496,891	2,023,665
1925	33	344	49,867,765	3,359,708	1,925,735
1926	32	322	44,346,672	3,018,358	1,807,780
1927	31	354	47,915,828	3,278,179	2,034,587
1928	32	350	45,960,928	3,154,644	1,973,730
1929	30	335	45,580,845	3,104,456	1,886,800
1930	30	332	36,007,146	2,657,059	1,802,095
1931	30	326	33,377,786	2,379,558	1,564,945

20.—Race Track Betting in Canada, by Provinces, 1931.

Province.	Number of Associations.	Number of Days Racing.	Amounts Wagered.	Pari-Mutuel Receipts Retained.	Prize Money.
			$	$	$
Quebec	6	84	5,237,716	383,590	303,300
Ontario	9	119	20,009,700	1,393,140	857,900
Manitoba	2	28	3,101,504	229,222	145,100
Saskatchewan	1	6	179,702	13,540	10,000
Alberta	7	34	1,350,907	100,954	75,145
British Columbia	5	55	3,498,257	259,112	173,500
Totals	**30**	**326**	**33,377,786**	**2,379,558**	**1,564,945**

Section 12.—The Advisory Board on Tariff and Taxation.

As indicated at p. 958 of the Year Book for 1932, provision was made by the present Government (c. 55 of the Statutes for 1931) for the appointment of a new Tariff Board. Part I of the Act defined the constitution, duties and powers of the Board, while Part II provided for the exercise, by the Tariff Board, of the duties of the Board of Customs and the substitution of the former for the latter body.

The functions of the Board were somewhat widened following the Imperial Economic Conference held in Ottawa in July, 1932, and it was announced that the Board would be responsible for seeing that the spirit and the letter of the undertakings then made with the United Kingdom are carried out. British manufacturers have the right to appear before the Board.

On Feb. 6, 1933, the following members were appointed to the Board: The Hon. George Herbert Sedgewick, a Justice of the High Court of Ontario, Toronto, Chairman; Milton Neil Campbell, Esq., M.P., Pelly, Sask., Vice-Chairman; and Charles Herbert, Esq., B.A., Montreal. The first hearing of the Board was scheduled to take place on July 13, 1933.

Section 13.—Other Miscellaneous Administration.

In previous editions of the Canada Year Book this chapter has been brought to a close with outlines of Dominion Government administration as follows:—

The International Joint Commission.
The Geodetic Survey of Canada.
The Topographical Survey.
The Dominion Observatories.

No material change has taken place in the functions of these organizations and the reader is referred to pp. 1014-1017 of the 1930 Year Book for this information.

CHAPTER XXIX.—SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION RELATIVE TO CANADA.

The chief source of information on the current state of the country is the Dominion Bureau of Statistics, organized as the central statistical bureau for Canada, and described in the first part of this chapter; a list of its publications, which cover almost the whole field of the national statistics, is given in Section 1.

The second section of the chapter contains a list of the Acts of Parliament administered by the several departments of the Dominion Government, and the third section a bibliography of the publications of these departments. This is followed, in Section 4, by a bibliography of the publications of Provincial Governments.

Section 1.—The Dominion Bureau of Statistics.[1]

The Dominion Bureau of Statistics was set up by Statute in 1918 as a central statistical department for Canada (8-9 Geo. V, c. 43). The Act was a consolidation of all previous statistical legislation and was based on the report of a Commission on Statistics, appointed in 1912, which recommended (a) a series of specific reforms and enlargements in Canadian statistics, and (b) a policy of statistical co-ordination for the Dominion, under central direction. In 1915, following the recommendations in this report, the office of Dominion Statistician was created.

The Bureau has been constituted by the transfer or absorption, by Orders in Council, of the following work and branches: (1) the Census and Statistics Office (covering the census, and also agriculture, general manufactures and criminal statistics), (2) Fisheries Statistics, (3) Mining Statistics, (4) Forestry Statistics, (5) Dairying and Fruit Statistics, (6) Water- and Electric-Power Statistics, (7) the Railways and Canals Statistical Branch of the Department of Railways and Canals, (8) the Trade Statistical Branch (exports and imports), (9) Grain Trade Statistics, (10) Live-Stock Statistics, (11) Prices Statistics, and (12) Employment Statistics. In addition four new branches were created, dealing respectively with Public Finance, Internal Trade, Vital Statistics, and Education. Subsequently the statistical activities of the Fuel Controller and the Board of Commerce were absorbed. Modifications of the Bankruptcy, Public Health and Railway Acts, and of the regulation *re* franking privileges were also made, with a view to facilitating the collection of statistics.

The Bureau has completed the plans for a unified, nation-wide statistical system, covering every important phase of social and economic activity, and has carried them out to a considerable degree.

The main achievement of the Bureau has been in the organization of the several subjects in correlation with each other in accordance with this general plan, and the consequent establishment of a comprehensive viewpoint of the country as a "going concern". In addition, there has been created what is frequently called a central "thinking office" in statistics, continuously in touch with general conditions and the line of probable developments.

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[1] A more complete account of the formation and activities of the Bureau of Statistics will be found on pp. 961-964 of the 1922-23 Year Book.

The final concept in the organization of the Bureau of Statistics is that of a national laboratory for social and economic research. Statistics are not merely a record of what has been, but are for use in planning what shall be; it is the duty of a statistical bureau to assist directly in the day-to-day problems of administration, as well as to provide their theoretic background. One of the most significant of recent developments in administration is the extent to which statistical organization has been increased as a guide to national policy. Though its usefulness has only begun, the Dominion Bureau of Statistics has laid the foundations for a service comparable with the increasingly important position taken by Canada in the economic and political world.

Publications of the Bureau.—The first annual report of the Dominion Statistician contained a full description of the organization of the Bureau and of its subject matter.[1] The main Branches of the Bureau are as follows: I. Administration; II. Population—Census and Vital Statistics; III. Agricultural Statistics; IV. Fisheries, Furs and Dairy Products; V. Mining, Metallurgical and Chemical; VI. Forestry and Allied Industries; VII. General Manufactures; VIII. External Trade (Imports and Exports); IX. Internal Trade; X. Transportation; XI. Financial Statistics; XII. Statistics of Administration of Justice; XIII. Education Statistics; XIV. General Statistics. The publications of the several Branches are as follows:—

ADMINISTRATION—

Annual Report of the Dominion Statistician.

POPULATION—

Census—

I. Census of Population and Agriculture, 1931.

Bulletins of the Seventh Census of Canada, 1931, as follows:—

(1) Population:—*Preliminary Bulletins.*—(1) to (3) Cities, Towns and Villages. (4) Ontario Villages. (5) Montreal Island. (6) Cities, Towns and Villages. (7) Villages of Manitoba, Saskatchewan and Alberta. (8) Villages of Quebec. (9) Cities, Towns and Villages. (10) Maritime Provinces by Federal Electoral Districts. (11) Ontario by Federal Electoral Districts. (12) Prairie Provinces by Federal Electoral Districts. (13) Quebec by Federal Electoral Districts. (14) British Columbia by Federal Electoral Districts; Yukon and Northwest Territories. (15) Canada by Provinces. (16) Cities replacing Census Bulletins 1, 2, 3, 5 and 6. (17) Towns replacing Bulletins 1, 2, 3, 5, 6 and 9. *Final Bulletins.*—(I) New Brunswick. (II) Nova Scotia. (III) Manitoba. (IV) Canada by Provinces. (IVa) Canada by Provinces, replacing IV. (V) Saskatchewan. (VI) Alberta. (VII) Quebec. (VIII) Ontario. (IX) British Columbia. (X) Prince Edward Island. (XI) Rural and Urban Population. (XII) Yukon and Northwest Territories. (XIII) Cities, Towns and Villages in Canada by Provinces. (XIV) Religions by Provinces. (XV) Birthplaces by Provinces. (XVI) Ages by Provinces. (XVII) Conjugal Condition by Provinces. (XVIII) School Attendance and Literacy by Provinces. (XIX) Radio Sets in Canada, 1931. (XX) Population of Canada, 1931, by Provinces, Electoral Districts and Subdistricts. (XXI) Population of Canada, 1931, by Religious Denominations. (XXII) Population of Canada, 1931, by Racial Origins. (XXIII) Immigrants by Years of Arrival in Canada. (XXV) Number and Percentage Single, Married, Widowed or Divorced of the Total Population, by Sex and Provinces, 1911, 1921 and 1931. (XXVI) Age Distribution by Single Years of Age for Canada, by Provinces, 1931. (XXVII) Immigrant Population Classified by Sex, Country of Birth, Province of Residence, Years of Arrival in Canada and Citizenship of the Foreign Born, 1931. (XXVIII) Gainfully Employed Ten Years of Age and Over Classified According to Occupation and Sex for Cities of 30,000 and Over, 1931. (XXIX) Birthplace of the Population Classified According to Nativity of Parents for Canada and Provinces, 1931. Unemployment and Wage Earner Bulletins: (I) Saint John, N.B.; (II) Winnipeg, Man.; (III) Kitchener, Ont.; (IV) Ottawa, Ont.; (V) Vancouver, B.C.; (VI) Hamilton, Ont.; (VII) Calgary, Alta.

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[1] This report for the year ended Mar. 31, 1919, is now out of print.

POPULATION—concluded.

Census—

(2) Census of Institutions:—*Preliminary Bulletin.*—(1) Mental Institutions.

(3) Agriculture:—*Preliminary Bulletins.*—(1) Number of Occupied Farms by Counties or Census Divisions 1931 and 1921; and the Number of Vacant or Abandoned Farms 1931. Preliminary Acreage: (1) Prince Edward Island. (2) New Brunswick. (3) Saskatchewan. (4) Manitoba. (5) British Columbia. (6) Ontario. (7) Nova Scotia. (8) Quebec. (9) Alberta. (10) Canada. Live Stock by Counties: (11) Prince Edward Island. (12) Nova Scotia. (13) New Brunswick. (14) Ontario Preliminary Acreage by Counties. (15) Manitoba Live Stock by Census Divisions. (16) New Brunswick Preliminary Acreage by Counties. (17) Alberta Live Stock by Census Divisions. (18) Saskatchewan Live Stock by Census Divisions. (19) British Columbia Live Stock by Federal Electoral Districts. (20) Quebec Live Stock by Counties. (21) Ontario Live Stock by Counties. Farm Holdings by Size for Provinces, Counties or Census Divisions. Farm Facilities by Provinces. Total Number of Farms, Farm Tenure, Farm Acreage, Farm Values, Mortgage Debt and Farm Expenses by Provinces. Farms Reporting Live Stock by Kinds and Total Number of Animals Reported for Each Kind. *Final Bulletins.*—Area and Yield of Field Crops 1930 and 1920: (22) Prince Edward Island; (23) Nova Scotia; (24) New Brunswick; (25) Ontario; (26) Quebec. Live Stock on Farms by Provinces. Tenure of Farm Lands by Provinces, Counties or Census Divisions. Number of Farm Workers, Weeks and Cost of Hired Labour, 1930. Fruit Trees on Farms, by Provinces, 1931 and 1921. Vegetables.—Area in 1931 and Area, Production and Value in 1930, by Provinces. Animal Products on Farms, by Counties: (I) Prince Edward Island; (II) Nova Scotia; (III) New Brunswick; (IV) Manitoba; (V) Saskatchewan; (VI) Alberta; (VII) Ontario; (VIII) Quebec; (IX) British Columbia. Live Stock on Farms, by Counties: (X) Prince Edward Island; (XI) Nova Scotia; (XII) New Brunswick; (XIII) Manitoba; (XIV) Saskatchewan; (XV) Alberta; (XVI) British Columbia; (XVII) Ontario.

II. Census of Population and Agriculture, 1921.

Bulletins of the Sixth Census of Canada, 1921, as follows:—

(1) Population: *(a)* Population of Canada, 1921, by Provinces, Electoral Districts, Cities, Towns, etc. *(b)* Religions of the People, 1921. *(c)* Origins of the People, 1921. *(d)* Dwellings and Families, 1921. *(e)* Birthplaces of the People, 1921. *(f)* Citizenship of the Foreign-born, 1921. *(g)* Year of Immigration, 1921. *(h)* Ages of the People, 1921. *(i)* Conjugal Condition of the People, 1921. *(j)* Language Spoken and Mother Tongue, 1921. *(k)* Literacy, 1921. *(l)* School Attendance, 1921. *(m)* Occupations, 1921. *(n)* Children in Gainful Occupations, 1921. Also bulletins on population by provinces as follows: *(a)* Population of Nova Scotia—Electoral Districts, etc. *(b)* Population of Prince Edward Island—Electoral Districts, etc. *(c)* Population of New Brunswick—Electoral Districts, etc. *(d)* Population of Quebec—Electoral Districts, etc. *(e)* Population of Ontario—Electoral Districts, etc. *(f)* Population of Manitoba—Electoral Districts, etc. *(g)* Population of Saskatchewan—Electoral Districts, etc. *(h)* Population of Alberta—Electoral Districts, etc. *(i)* Population of British Columbia—Electoral Districts, etc.

(2) Agriculture: *(a)* Field Crops of Prairie Provinces, 1921. *(b)* Agriculture of Canada—General Summary. *(c)* Pure-bred Domestic Animals, 1921. *(d)* Agriculture of Nova Scotia, 1921. *(e)* Agriculture of Prince Edward Island, 1921. *(f)* Agriculture of New Brunswick, 1921. *(g)* Agriculture of Quebec, 1921. *(h)* Agriculture of Ontario, 1921. *(i)* Agriculture of Manitoba, 1921. *(j)* Agriculture of Saskatchewan, 1921. *(k)* Agriculture of Alberta, 1921. *(l)* Agriculture of British Columbia, 1921.

Reports of the Sixth Census of Canada, 1921, as follows:—

Vol. I. Introduction—Number, Sex and Distribution—Racial Origins—Religions.

Vol. II. Ages—Conjugal Condition—Birthplace—Birthplace of Parents—Year of Immigration and Naturalization—Language Spoken and Mother Tongue—Literacy—School Attendance—Blindness and Deaf-Mutism. (Out of print.)

Vol. III. Families—Dwellings—Ownership of Homes—Rentals—Earnings. (Out of print.)

Vol. IV. Occupations and Employment.

Vol. V. Agriculture. Farm Holdings by size, tenure, value, etc.—Farm Products—Field Crops—Vegetables—Fruits—Forest Products—Live Stock—Animal Products—Statistics of Operators.

POPULATION—concluded.

Census—

Census Monographs, 1921.
Illiteracy and School Attendance in Canada.
Origin, Birthplace, Nationality and Language of the Canadian People.

III. Census of Population and Agriculture of the Prairie Provinces, 1926.

Report of the Census of Population and Agriculture of the Prairie Provinces, 1926.
Census of Manitoba—Population and Agriculture.
Census of Saskatchewan—Population and Agriculture.
Census of Alberta—Population and Agriculture.

Preliminary Bulletins as follows: *(a)* Population of Manitoba—Electoral Districts, etc. *(b)* Population of Saskatchewan—Electoral Districts, etc. *(c)* Population of Alberta—Electoral Districts, etc. *(d)* Animals on Farms in the Prairie Provinces, 1926. *(e)* Farm Lands and Crops in the Prairie Provinces, 1926.

IV. Intercensal Estimates of Population.

Births, Deaths and Marriages—

V. Vital Statistics.

Annual Report on Vital Statistics of Canada by Provinces and Municipalities.
Preliminary Annual Report on Vital Statistics of Canada.
Preliminary Quarterly Report on Vital Statistics of Canada.
Monthly Report of Births, Deaths and Marriages registered in Cities.
Report of Conference on Vital Statistics, held June 19-20, 1918, pp. 1-48.
Special Report on Contributory Causes of Death, 1926.
Order of Birth in the Registration Area of Canada, 1925.
Physicians' Pocket Reference to the International List of Causes of Death.

PRODUCTION—

I. General Summary of Production.

Including and differentiating (gross and net) (1) Primary Production (Agriculture, Fishing, Furs, Forestry and Mining) and (2) Secondary Production, or General Manufactures.

II. Agriculture.

(1) Agricultural Production.

Monthly Bulletin of Agricultural Statistics. The official record of current statistical data relating to agriculture. (Contains reports on agricultural conditions, prices, weather, etc.—estimates of areas, yields, quality and value of field crops—value of farm lands—wages of farm help—number and values of farm live stock and poultry—statistics of fruit and floriculture—dairying—tobacco—hives and honey—maple syrup and sugar—clover and grass seed—miscellaneous crops—stocks of grain—annual summary of value of agricultural production—index numbers of agricultural prices, yields and values—international agricultural statistics.)
Advance Summaries of Agricultural Statistics.
Telegraphic Crop Reports (between the first of June and the first of September, weekly for the Prairie Provinces and every two weeks for the rest of Canada).
Agricultural Statistics by Counties and Crop Districts, 1922-24 and 1925-29.
Annual Statistics of Fruit and Floriculture, latest issue, 1932.
Handbook of Instructions to Crop Correspondents, and Summary of Annual Agricultural Statistics, 1931.
[See also Censuses of Agriculture above.]

(2) Grain and Grain Products.
(a) Annual Report on the Grain Trade of Canada; *(b)* Monthly Review of the Wheat Situation; *(c)* Canadian Grain Statistics—weekly report on grain supplies and movements; *(d)* Canadian Milling Statistics—monthly; *(e)* List of Mills with Capacity; *(f)* The Grain Situation in the Argentine—monthly; *(g)* The Production and Distribution of Coarse Grains; *(i)* Barley.

(3) Live Stock and Animal Products.
(a) Annual Report on Live Stock and Animal Products Statistics; *(b)* Monthly Reports on Stocks in Cold Storage; Advance, Preliminary and Final; *(c)* Annual Estimates of the Consumption of Meats, Butter, Cheese, Eggs and Poultry in Canada.

(4) Other.
Monthly Report on Raw and Refined Sugar (visible supply, meltings, shipments, exports and imports).

PRODUCTION—continued.

III. Furs.

Advance Summary of Fur Farm Statistics.

Annual Report on Fur Farms.

Advance Summary of Statistics of the Production of Raw Furs.

Annual Report on the Production of Raw Furs, comprising the pelts taken by trappers and those sold from fur farms.

IV. Fisheries.

Annual Report on Fisheries Statistics.

Advance Summaries on Fish Caught and Marketed, by Provinces.

V. Forestry.

Annual Summary of the Value, etc., of Forest Production. (Covers operations in the woods for saw-mills, shingle mills, pulp and paper mills, etc., production of mining timber, production of poles and cross ties, and farm production (decennial) of firewood, posts, etc.)

[See also Reports on Manufactures of Forestry Products listed under "Manufactures" Section VII, subsection (5).]

VI. Mineral Production: (Mining and Metallurgy.)

(1) General.

(a) Annual Report on the Mineral Production of Canada; *(b)* Preliminary Reports (semi-annual) on the Mineral Production of Canada; *(c)* Monthly Reports on Leading Minerals.

(2) Coal.

(a) Annual Report on Coal Statistics for Canada; *(b)* Monthly Summary Report on Coal and Coke Statistics for Canada; *(c)* Quarterly Report on Coal and Coke Statistics for Canada.

(3) Annual Bulletins on Mining as follows:—

1. *Metals—(a)* Arsenic; *(b)* Cobalt; *(c)* Copper; *(d)* Gold; *(e)* Lead; *(f)* Nickel; *(g)* Metals of the Platinum Group; *(h)* Silver; *(i)* Zinc; *(j)* Miscellaneous Metals, including Aluminium, Antimony, Chromite, Iron Ore, Manganese, Mercury, Molybdenum, Tin, Tungsten.
2. *Non-Metallic Minerals—(a)* The Abrasive Industry; *(b)* The Asbestos Mining Industry; *(c)* The Feldspar and Quartz Mining Industry; *(d)* The Gypsum Mining Industry; *(e)* The Iron Oxides (Ochres) Mining Industry; *(f)* The Mica Mining Industry; *(g)* The Salt Industry; *(h)* The Talc and Soapstone Mining Industry; *(i)* The Crude Petroleum Industry; *(j)* The Natural Gas Industry; *(k)* Miscellaneous Non-Metallic Minerals—Actinolite, Barytes, Bituminous Sands, Fluorspar, Graphite, Magnesite, Bog Manganese, Mineral Waters, Peat, Phosphate, Silica Brick, Sodium Carbonate, Sodium Sulphate, Sulphur.
3. *Structural Materials—(a)* Cement; *(b)* Clay and Clay Products; *(c)* Lime; *(d)* Stone.

(4) Annual Bulletins on Mining Industries as follows:—

1. *Metal Mining—(a)* Gold Mining Industry (including Alluvial Gold Mining, Auriferous Quartz Mining, and Copper-Gold-Silver Mining); *(b)* Silver-Cobalt and Silver-Lead-Zinc Mining Industries. *(c)* Nickel-Copper Mining, Smelting and Refining Industry; *(d)* The Non-Ferrous Smelting and Refining Industry, and also separate bulletins on the Canadian production of copper, metals of the platinum group, and miscellaneous metals.

[See also Reports on Iron and Steel and their Products, Manufactures of Non-Ferrous Metals, and Chemicals and Allied Products, listed under "Manufactures", Section VII, Subsections (6), (7), (8) and (9).]

VII. Manufactures.

(1) General—General Summary for Canada, also for the Provinces and Leading Cities (industrial groups classified by component materials, purposes and origins of products—comparative statistics); Alphabetical List of Products; Quantity of Manufacturing Production in Canada, 1923-29.

(2) Manufactures of Vegetable Products—General Report. Annual Bulletins as follows: *(a)* Coffee, Tea and Spices; *(b)* Fruit and Vegetable Preparation, including canning, evaporating and preserving and Pickles, Sauces, Vinegar and Cider; *(c)* Flour and Grist Mill Products; *(d)* Bread and other Bakery Products; *(e)* Biscuits and Confectionery including Cocoa and Chocolate; *(f)* Macaroni and Vermicelli; *(g)* Liquors, Distilled; *(h)* Liquors, Malt; *(i)* Liquors, Vinous; *(j)* Rubber Goods and Rubber Boots and Shoes; *(k)* Prepared Breakfast Foods; *(l)* Sugar Refineries; *(m)* Tobacco Products; *(n)* Linseed Oil and Oil Cake; *(o)* The Canned Foods Industry; *(p)* Ice Cream; *(q)* Pack of Fruits and Vegetables; *(r)* Barley and Its Production; *(s)* Mixed Feed Trade in Canada.

PRODUCTION—continued.

(3) *Animal Products and their Manufactures*—Annual Reports and Bulletins as follows: *(a)* The Dairy Factory Industry; *(b)* Slaughtering and Meat Packing and Sausage and Sausage Casings; *(c)* Fish and Fish Products; *(d)* Leather Tanneries; *(e)* Harness and Saddlery, Leather Belting, Trunks and Valises, Miscellaneous Leather Goods; Boot and Shoe Findings, Leather; *(f)* Leather Boots and Shoes; *(g)* Leather Gloves and Mitts; *(h)* Fur Goods, Fur Dressing. Monthly Report on Boot and Shoe Production. Monthly Report on Concentrated Milk Products. Monthly Report on Creamery Butter Production.

[See also Reports on Live Stock, etc., listed under "Agriculture".]

(4) *Textile and Allied Industries*—General Report on The Textile Industries of Canada. Annual Bulletins as follows: *(a)* Cotton Textiles (cloth, yarn, thread and waste); *(b)* Woollen Textiles (cloth, yarn, waste, carpets, etc., and woollen goods, n.e.s.); *(c)* The Silk Industry; *(d)* Clothing, Men's Factory; *(e)* Clothing, Women's Factory; *(f)* Hats and Caps; *(g)* Hosiery and Knitted Goods; *(h)* Men's Furnishings, n.e.s.; *(i)* Oiled Clothing and Waterproofs; *(j)* Cordage, Rope and Twine; *(k)* Corsets; *(l)* Cotton and Jute Bags; *(m)* Dyeing, Cleaning and Laundry Work; *(n)* Dyeing and Finishing of Textiles; *(o)* Production and Distribution of Raw Wool in Canada.

(5) *Manufactures of Forestry Products*—Printed Annual Reports as follows: (1) The Lumber Industry; (2) The Pulp and Paper Industry; (3) Wood-Using Industries; (4) Paper-Using Industries. Mimeographed Preliminary Annual Reports as follows: *(a)* The Lumber Industry; *(b)* Lumber Distribution in Canada and the United States (biennial); *(c)* The Pulp and Paper Industry; *(d)* Planing Mills, Sash and Door Factories; *(e)* Hardwood Flooring; *(f)* Furniture; *(g)* Boxes, Baskets and Crates; *(h)* Carriages, Wagons and Materials; *(i)* Cooperage; *(j)* Coffins and Caskets; *(k)* Sporting Goods; *(l)* Boatbuilding; *(m)* Lasts, Trees and Shoe Findings; *(n)* Handles, Spools and Woodturning; *(o)* Woodenware; *(p)* Excelsior; *(q)* Miscellaneous Wood-Using Industries; *(r)* Printing and Publishing; *(s)* Printing and Bookbinding; *(t)* Lithographing; *(u)* Engraving, Electrotyping, Stereotyping and Blueprinting; *(v)* Trade Composition; *(w)* Paper Boxes and Bags; *(x)* Stationery and Envelopes; *(y)* Roofing Paper and Wallboard; *(z)* Miscellaneous Paper Goods *Mimeographed Monthly Reports*—*(a)* Asphalt Roofing; *(b)* Rigid Insulating Board

(6) *Iron and Steel and Their Products*—Annual Report. Annual Bulletins as follows: *(a)* Primary Iron and Steel; *(b)* Castings and Forgings; *(c)* Boilers, Tanks and Engines; *(d)* Agricultural Implements; *(e)* Machinery; *(f)* Automobiles; *(g)* Automobile Supplies; *(h)* Railway Rolling Stock; *(i)* Wire and Wire Goods; *(j)* Sheet Metal Products; *(k)* Hardware and Tools; *(l)* Bridge Building and Structural Steel; *(m)* Miscellaneous Iron and Steel Products. Monthly reports on *(a)* Iron and Steel; *(b)* Automobile Statistics; Commodity bulletins on the production of Pig Iron; Washing Machines; Cream Separators; Warm Air Furnaces; Galvanized Sheets; Wire Nails; Wire Rope and Cable; Steel Wire; Wire Fencing; Stoves, etc.

(7) *Manufactures of Non-Ferrous Metals*—Report issued biennially. Annual Bulletins as follows: *(a)* Aluminium Products; *(b)* Brass and Copper Products; *(c)* Lead, Tin and Zinc Products; *(d)* Jewellery and Silverware; *(e)* Electrical Apparatus and Supplies; *(f)* Miscellaneous Non-Ferrous Metal Goods. Quarterly Report on Production and Sales of Radio Sets. Commodity Bulletins on the Production of Batteries; Silverware; Vacuum Cleaners, etc.

(8) *Manufactures of the Non-Metallic Minerals*—Report issued biennially. Annual Bulletins as follows: *(a)* Aerated Waters; *(b)* Asbestos Products; *(c)* Cement; *(d)* Cement Products; *(e)* Coke and Gas; *(f)* Glass (blown, cut and ornamental, etc.); *(g)* Lime; *(h)* Petroleum Products; *(i)* Products from Domestic Clays; *(j)* Products from Imported Clays; *(k)* Salt; *(l)* Sand-lime Brick; *(m)* Dressed Stone ; *(n)* Artificial Abrasives and Abrasive Products; *(o)* Miscellaneous Non-Metallic Mineral Products, including Carbon Electrodes—Gypsum Products—Mica Products—Magnesite Products—Non-Metallic Minerals, n.e.s. Also special report on the Consumption of Coke in Canada. Monthly Report on Coke Statistics.

(9) *Chemicals and Allied Products*—Annual Report. Annual Bulletins as follows: *(a)* Coal Tar Distillation; *(b)* Acids, Alkalies and Salts; *(c)* Compressed Gases; *(d)* Explosives, Ammunition and Fireworks; *(e)* Fertilizers; *(f)* Medicinal and Pharmaceutical Preparations; *(g)* Paints, Pigments and Varnishes; *(h)* Soaps, Cleaning Preparations and Washing Compounds; *(i)* Toilet Preparations; *(j)* Inks; *(k)* Adhesives; *(l)* Polishes and Dressings; *(m)* Flavouring Extracts; *(n)* Wood Distillation; *(o)* Miscellaneous Chemical Products, including Baking Powder; Boiler Compounds; Cellulose Products; Insecticides; Sweeping Compounds; Disinfectants; Matches; Dyes and Colours; Chemical Products, n.e.s. Special Report on the Fertilizer Trade in Canada. Commodity Bulletins on Sulphuric Acid, Ammonium Sulphate, etc. *Special Report*—Directory of Chemical Industries in Canada, as of July 1, 1932.

PRODUCTION—concluded.

(10) *Miscellaneous Manufactures*—General Report. Annual Bulletins as follows: *(a)* Brooms, Brushes and Mops; *(b)* Musical Instruments (including pianos, organs and phonographs) and Musical Instrument Materials and Parts; *(c)* Buttons; *(d)* Beds, Springs and Mattresses.

N.B.—For statistics of Water Power and Central Electric Stations, see under heading "Public Utilities".

VIII. Construction.—(a) Building Permits—Monthly and Annual Record.

EXTERNAL TRADE (IMPORTS AND EXPORTS)—

(1) Annual Report of the Trade of Canada, for the fiscal year ended Mar. 31 (showing summary historical tables, analyses of current trends, detailed tables by items, group analyses according to component material, origin and degree of manufacture, and purpose, and comparisons of the volume of trade).

(2) Condensed Preliminary Report of the Trade of Canada, for the fiscal year ended Mar. 31.

(3) Annual Report of the Trade of Canada for the calendar year.

(4) Advance Preliminary Statement regarding the Trade of Canada during the calendar year.

(5) Quarterly Report of the Trade of Canada (showing statistics of imports and exports by months and cumulative quarters).

(6) Monthly Summary of the Trade of Canada (for latest month and 12 months).

(7) Monthly Bulletins on Trade Statistics as follows: *General—(a)* Abstract of Imports, Exports, and Duty Collected (by latest month, accrued period, and latest 12 months); *(b)* Summary of Canada's Imports for latest month; *(c)* Summary of Canada's Exports for latest month. *Special.—(d)* Imports and Exports of Asbestos; *(e)* Imports and Exports of Footwear (except Rubber); *(f)* Summary, Exports of Grain and Flour; *(g)* Exports of Lumber; *(h)* Imports of Lumber; *(i)* Exports of Meats and Lard; *(j)* Imports of Meats and Lard; *(k)* Exports of Milk, Milk Products and Eggs; *(l)* Imports of Milk, Milk Products and Eggs; *(m)* Exports of Non-Ferrous Ores and Smelter Products; *(n)* Imports of Non-Ferrous Ores and Smelter Products; *(o)* Exports of Paints and Varnishes; *(p)* Imports of Paints and Varnishes; *(q)* Exports of Pulp Wood, Wood Pulp and Paper; *(r)* Exports of Rubber Goods and Insulated Wire; *(s)* Imports of Rubber Goods; *(t)* Imports of Vehicles of Iron (Automobiles, Bicycles, Railway Cars, etc.); *(u)* Exports of Petroleum and Its Products; *(v)* Imports of Petroleum and Its Products; *(w)* Imports of Sheet Metal Products; *(x)* Exports of Farm Implements and Machinery; *(y)* Imports of Farm Implements and Machinery; *(z)* Imports of Coffee and Tea.

INTERNAL TRADE—

(1) *Retail and Wholesale Trade.*—Decennial Census of Merchandising and Service Establishments. Bulletins on the Retail Trade of Cities with a population of 10,000 and over showing number of establishments, kind of business, type of organization, employees, wages, sales, etc. Bulletins on the Retail Trade of Provinces. Bulletins on the Retail Trade of Provinces by Counties or Census Districts. Bulletin on the Retail Trade of the Dominion. Bulletins on the Wholesale Trade of the Dominion, Provinces and Chief Cities, including the business of Agents of Distribution, such as Brokers, Sales Agents, Importers, and others, as distinguished from Wholesalers Proper. Survey of Chain Stores. The analysis of these Census data includes Special Studies such as: Channels of Distribution between Manufacturer and Consumer, Hotels, Co-operative Associations, Breakdown of Commodity Sales according to Kind of Business, etc. Monthly Index Numbers of Retail Sales. Monthly Retail Sales of Automobiles. Monthly figures of Automobile Financing.

(2) *Prices Statistics.*—Annual and Monthly Reports on Wholesale and Retail Prices and Price Indexes in Canada, the British Empire and Foreign Countries. Index Numbers of Average Cost of Living in Canada. Monthly and Weekly Index Numbers (Speculative) of Security Prices. Monthly and Weekly Index Numbers (Investment) of Security Prices. Monthly and Weekly Index Numbers of Mining Stocks. Prices and Price Index Numbers of Services (Street Cars, Telephones, Electricity, Natural and Manufactured Fuel Gas, Hospitals, Doctors' Fees, etc.). Interest and Exchange Rates. Index Numbers of Import and Export Valuations. Special Bulletins as follows: *(a)* Post-War Sugar Prices; *(b)* Post-War Prices of Raw Cottons; *(c)* Post-War Silver Prices; *(d)* Post-War Tin Prices; *(e)* Post-War Lead Prices; *(f)* Coffee Prices; *(g)* Post-War Rubber Prices; *(h)* Price Trends and Economic Conditions in Germany (May, 1927); (i) Price Trends and General Economic

INTERNAL TRADE—concluded.

Conditions in France (May, 1927); *(j)* Price Trends and General Economic Conditions in Great Britain (May, 1927); *(k)* Wholesale Prices in the British Empire and Foreign Countries, and Exchange Rates in 1925 (with reference to important trade tendencies in the leading countries); *(l)* Trend of Commodity Prices in Canada, Past and Future; *(m)* Recent Movements in Canadian Living Costs; *(n)* Exchange, 1931; *(o)* Price Movements, 1932.

(3) Capital Movements.—Annual Records and Estimates of Capital Investments by Foreigners in Canada and of Canadian Investments in Foreign Countries.

(4) Record of Branch Plant Development in Canada.—Lists of New Concerns Locating in Canada in Recent Years. Bulletin on Branch and Subsidiary Industries in Canada.

(5) Balance of International Payments.—Compilation of Canada's Annual Balance of Payments. Estimation of the Invisible Items in Canada's Trade Balance (Receipts and Payments for Interest, Freight, Insurance, Non-Commercial Remittances, Government Expenditures, Capital of Immigrants and Emigrants, etc.).

TRANSPORTATION, COMMUNICATIONS AND PUBLIC UTILITIES—

(1) Railways and Tramways.—(a) Annual Report on Railway Statistics; *(b)* Annual Report on Electric Railway Statistics; *(c)* Annual Summary of Monthly Railway Traffic Report; *(d)* Monthly Bulletin on Railway Revenues, Expenses, Incomes and Operating Statistics; *(e)* Monthly Statement of Traffic of Railways; *(f)* Weekly Report of Car Loadings of Revenue Freight.

(2) Express.—Annual Report on Express Statistics.

(3) Telegraphs.—Annual Report on Telegraph Statistics.

(4) Telephones.—Annual Report on Telephone Statistics.

(5) Water Transportation.—(a) Annual Report on Canal Statistics; *(b)* Monthly Report on Canal Statistics.

(6) Electrical Stations.—(a) Annual Report on Central Electric Stations in Canada; *(b)* Report on Index Numbers of Electric Light Rates; *(c)* Monthly Report on Electric Energy Generated.

(7) Motor Vehicles.—(a) Annual Report on Motor Vehicle Registrations; *(b)* Highways—Annual Report on Highway Mileage Open for Traffic, Construction and Expenditures on Construction and Maintenance.

FINANCE—

(1) Municipal.—(a) Annual Municipal Statistics of Urban Municipalities of 10,000 Population and Over. *(b)* Municipal Statistics of Urban Municipalities of 1,000 to 5,000 Population, 1922. *(c)* Annual Bulletins on Assessed Valuations by Provinces, Municipal Bonded Indebtedness, etc.

(2) Dominion.—(a) Statistics of the Civil Service of Canada—Annual Report; *(b)* Statement of Civil Service Personnel and Salaries in the Month of January, 1912-1924.

(3) Provincial.—Annual Report.—Financial Statistics of Provincial Governments. Bonded Debt and Treasury Bills of Provincial Governments, 1916-30.

JUSTICE—

(1) Criminal Statistics.—Annual Report (covering convictions, sentences, prison statistics, police statistics, pardons, commutations and executions).
Preliminary Report on Criminal Statistics.

(2) Juvenile Delinquency.—Annual Bulletin.

EDUCATION—

(1) Report of Dominion-Provincial Conference on Education Statistics, held October, 1920.

(2) Historical Statistical Survey of Education in Canada (1921). (Out of print.)

(3) Illiteracy and School Attendance in Canada—A Study of the Census of 1921 with Supplementary Data.

(4) Annual Survey of Education in Canada. Published yearly since 1921, covering the following:—*(a)* Provincially-controlled schools; *(b)* Universities and colleges; *(c)* Private schools; *(d)* Schools for Indians; *(e)* Organizations and societies of provincial or Dominion scope directly connected with the above-listed institutions.

(5) Survey of Canadian Libraries, 1931.

(6) Reports on special subjects in the field of education are issued from time to time.

GENERAL—

(1) *National Wealth and Income.*—Estimates of the National Wealth of Canada, by Provinces, Industries, etc.—Summary of Income Tax Receipts.

(2) *Employment.*—Monthly and Annual Reports on Employment, with Index Numbers of Employment by Localities and Industries.

(3) *Commercial Failures.*—Monthly and Annual Reports.

(4) *Bank Debits.*—Monthly and Annual Reports of Bank Debits to Individual Accounts at the Clearing-House Centres of Canada.

(5) *Business Statistics.*—The Monthly Review of Business Statistics (a statistical summary, with charts and text, of current economic conditions in Canada). Special Report—Twelve Years of the Economic Statistics of Canada, 1919-30. Monthly Indexes of the Physical Volume of Business in Canada, 1919-32.

(6) *Divorce.*—Annual Report.

(7) *Liquor Control.*—Annual Report on the Control and Sale of Liquor.

(8) *Tourist Trade.*—Annual Report.

(9) *The Canada Year Book.*—The official statistical annual of the Physiography, Resources, History, Institutions and Social and Economic Conditions of the Dominion, with a Statistical Summary of the Progress of Canada, maps, diagrams, etc.

Contents: I. Physical Characteristics of Canada (Geographical Features; Geological Formation; Seismology; Flora; Faunas; Natural Resources; Climate and Meteorology). II. History and Chronology. III. Constitution and Government (Constitution and General Government of Canada; Provincial and Local Government in Canada; Parliamentary Representation in Canada). IV. Population (Growth and Distribution). V. Vital Statistics. VI. Immigration. VII. Survey of Production. VIII. Agriculture. IX. Forestry. X. Fur Trade. XI. Fisheries. XII. Mines and Minerals. XIII. Water Powers. XIV. Manufactures. XV. Construction. XVI. External Trade. XVII. Internal Trade. XVIII. Transportation and Communications (Government Control over Transportation and Communications; Steam Railways; Electric Railways; Express Companies; Roads and Highways; Motor Vehicles; Air Navigation; Canals; Shipping and Navigation; Telegraphs; Telephones; Radio; Post Office). XIX. Labour and Wages. XX. Prices. XXI. Public Finance (Dominion Public Finance; Provincial Public Finance; Municipal Public Finance; National Wealth and Income). XXII. Currency and Banking; Loan and Trust Companies. XXIII. Insurance (and Government Annuities). XXIV. Commercial Failures. XXV. Education. XXVI. Public Health and Benevolence. XXVII. Judicial and Penitentiary Statistics. XXVIII. Miscellaneous Administration (Public Lands; National Defence; Public Works, etc.). XXIX. Sources of Official Statistical and Other Information Relative to Canada. XXX. The Annual Register (Dominion Legislation; Principal Events of the Year; Extracts from *The Canada Gazette, re* Official Appointments, Commissions, etc.). Appendices.

(Issues of the Canada Year Book for 1921, 1924, 1926, 1930, 1931 and 1932 are available.)

(10) *Canada.*—The Official Handbook of Present Conditions and Recent Progress, published annually.

Section 2.—Acts Administered by Dominion Departments.

List of the Principal Acts of Parliament administered by Departments of the Government of the Dominion of Canada, as compiled from information supplied by the respective Departments.

(Numbers within parentheses, unless otherwise indicated, denote chapters of the Revised Statutes of Canada, 1927—R.S.C., 1927.)

Note.—Copies of individual Acts of Parliament may be obtained from the King's Printer at prices of from 10 cents to $1 per copy according to number of pages.

Agriculture.—Experimental Farm Stations (61); Fruit (80); Dairy Industry (45); Cold Storage (25); Seeds (185); Feeding Stuffs (67); Live Stock Pedigree (121); Live Stock and Live Stock Products (120); Animal Contagious Diseases (6); Meat and Canned Foods (77); Destructive Insect and Pest (47); Fertilizers (69); Root Vegetables (181); Section 235, Criminal Code (Race Track Betting) (36); Inspection and Sale (100); Maple Sugar Industry (20-21 Geo. V, c. 30); Agricultural Pests Control (5).

Auditor General.—Consolidated Revenue and Audit (21-22 Geo. V, c. 27).

Civil Service Commission.—Civil Service (22), as amended 1932, c. 40.

External Affairs.—The functions and duties of this Department are defined by the Department of External Affairs Act (65) and by the International Boundary Waters Treaty Act, 1911 (1-2 Geo. V, c. 28), as amended by the Statute of April 3, 1914 (4 Geo. V, c. 5).

Finance.—Appropriation; Bank (12); Bills of Exchange (16); Board of Audit (10); Canadian Farm Loan (66); Civil Service Superannuation (24); Consolidated Revenue and Audit (21-22 Geo. V, c. 27); Contingencies (31); Currency (40); Dept. of Finance and Treasury Board (71); Dominion Notes (41); Federal District Commission (Stats. 1926-27, c. 55); Finance (70); Interest (102); Ottawa Mint (134); Penny Bank (13); Provincial Subsidies (192); Quebec Savings Banks (14); Special War Revenue (179) (in part); Gold Export (1932, c. 33).

Fisheries.—Fisheries (73); Fish Inspection (72); Meat and Canned Foods (77) (so far as it relates to fish or shellfish); Deep Sea Fisheries (74); Northern Pacific Halibut Fishery Protection (75); Pelagic Sealing (153); Customs and Fisheries Protection (43) (in part); Navigable Waters Protection (140) (in part); The Biological Board Act (18) is also administered by the Minister of Fisheries.

Immigration.—The Immigration Act and Regulations, 1910 (93); the Chinese Immigration Act and Regulations, 1923 (95).

Indian Affairs.—Indian (98).

Insurance.—Department of Insurance (22-23 George V, c. 45); Canadian and British Insurance Companies, 1932 (22-23 George V, c. 46); Foreign Insurance Companies, 1932 (22-23 George V, c. 47); Loan Companies (28); Trust Companies (29).

Interior.—Forest Reserves and Parks Act (78); Seed Grain Act (87); Seed Grain Sureties (88); Department of the Interior Act (103); Irrigation Act (104); Dominion Lands Act (113); Public Lands Grants Act (114); Ordnance and Admiralty Lands Act (115); Railway Belt Act (116); Dominion Lands Survey Act (117); Land Titles Act (118); Manitoba Supplementary Provisions Act (124); Migratory Birds Convention Act (130); Northwest Game Act (141); Northwest Territories Act (142); Reclamation Act (175); Saskatchewan and Alberta Roads Act (180); Soldier Settlement Act (188); Dominion Water Power Act (210); Railway Belt Water Act (211); Yukon Act (215); Yukon Placer Mining Act (216); Yukon Quartz Mining Act (217); Lac Seul Conservation Act (18-19 George V, c. 32); The National Parks Act (20-21, George V, c. 33).

Justice.—Department of Justice (106); Solicitor-General's (107); Northwest Territories (142); Yukon (215); Royal Canadian Mounted Police (160); Judges (105); Supreme Court (35); Exchequer Court (34); Admiralty (33); Petition of Right (158); Criminal Code (36); Penitentiary (154); Prisons and Reformatories (163); Identification of Criminals (38); Ticket of Leave (197); Fugitive Offenders (81); Extradition (37); Juvenile Delinquents (108).

King's Printer and Controller of Stationery.—Public Printing and Stationery (162); The Publication of Statutes (2).

Labour.—Labour Department (111); Conciliation and Labour (110); Industrial Disputes Investigation (112); Fair Wages Resolution of the House of Commons, 1900; Employment Office Co-ordination (57); Technical Education (193), as amended 1929, c. 8; The Vocational Education Act, 1931 (21-22 Geo. V, c. 59); Government Annuities (as amended by Geo. V, c. 33) (7); Combines Investigation (26); Old Age Pensions (156) (as amended by 21-22 Geo. V, c. 42); White Phosphorus Matches (128); Fair Wages and Eight-Hour Day (20-21 Geo. V, c. 20); Unemployment Relief, 1930 (21 Geo. V, c. 1); Unemployment and Farm Relief Act, 1931 (21-22 Geo. V, c. 58); Relief Act, 1932 (22-23 Geo. V, c. 36).

Marine.—Government Harbours, Piers and Breakwaters (89); Shipping of Live Stock (122); Marine and Fisheries Department (125); Maritime Conventions (126); Navigable Waters' Protection (140); Quebec Harbour and River Police (169); Canada Shipping (186); Radiotelegraph (195); Government Vessels Discipline (203); Belleville Harbour Commission (1889, c. 35); Halifax Harbour Commission (1927, c. 58); Hamilton Harbour Commission (1912, c. 98); Montreal Harbour Commission (1894, c. 48; 1909, c. 24; 1912, c. 35; 1913, c. 32; 1914, c. 42); North Fraser Harbour Commission (1913, c. 162); New Westminster Harbour Commission (1913, c. 158); Quebec Harbour Commission (1899, c. 34) (1905, c. 33); Saint John, N.B., Harbour Commission (1927, c. 67); Three Rivers, Que., Harbour Commission (1923, c. 71); Trenton, Ont., Harbour Commission (1922, c. 50); Toronto Harbour Commission (1911, c. 26); Vancouver Harbour Commission (1913, c. 54); Winnipeg and St. Boniface Harbour Commission (1912, c. 55); Chicoutimi Harbour Commission (1926, c. 6).

Mines.—Geology and Mines (83); Explosives (62); The Domestic Fuel (17 Geo. V, c. 52).

National Defence.—Department of National Defence Act (136); Naval Service Act (139); Naval Discipline Act; Militia Act (132); Militia Pensions Act (133); Royal Military College Act (18-19 Geo. V, c. 7); Sec. 85 and 86 Criminal Code; Army Act; Regimental Debts Act; Aeronautics Act (3); Air Force Act; Visiting Forces, British Commonwealth, 1933.

National Revenue.—Customs Tariff (44); Customs (42); Canada Shipping (in part) (186); Animal Contagious Diseases (in part) (6); Destructive Insect and Pest (in part) (47); Export (63); Copyright (in part) (32); Petroleum and Naphtha (159); Excise (60); Special War Revenue, 1915 (179); Income War Tax, 1917 (97); Agricultural Pests Control (in part) (5); Customs and Fisheries Protection (in part) (43); Explosives (in part) (62).

Pensions and National Health.—*Pensions*—Department of Pensions and National Health (Part I) (18-19 Geo. V, c. 39); War Veterans' Allowance (20-21 Geo. V, c. 48); Pension (157); Returned Soldiers' Insurance (10-11 Geo. V, c. 54, and Amendments). The two latter Acts are adjudicated upon by the Board of Pension Commissioners. *National Health.*—Department of Pensions and National Health (Part II) (18-19 Geo. V, c. 39); Quarantine (168); Public Works Health (91); Leprosy (119); Canada Shipping (Sick and Distressed Mariners) (186); Proprietary or Patent Medicine (151); Opium and Narcotic Drug (144); Food and Drugs (including Honey Act) (76).

Post Office.—Post Office (161); Special War Revenue (in part) (179).

Public Works.—Public Works (166); Government Harbours and Piers (s. 589); Navigable Waters Protection (140); Telegraphs (194); Dry Dock Subsidies (191); Act to authorize the payment of a subsidy to the Collingwood Shipbuilding Co., Ltd. (2 Geo. V, 1912, c. 17); Government Works Toll Act (167); Act to incorporate the National Gallery of Canada (3-4 George. V, 1913, c. 33); Act to authorize the payment of a subsidy to the Western Dry Dock and Shipbuilding Co., Ltd. (3-4 Geo. V, 1913, c. 57); Act to extend an Agreement for one year between His Majesty the King and the Corporation of the City of Ottawa (22-23 Geo. V, c. 11); Ferries Act (68), transferred by Order in Council, June 3, 1918, for administration by Public Works Department. Act Regulating Vehicular Traffic on Dominion Property (20-21 Geo. V, c. 47).

Railways and Canals.—Department of Railways and Canals (171); Government Railways (173); Intercolonial and P.E.I. Railway Employees' Provident Fund (6-7 Edw. VII, c. 22 and amending Acts); Acts to amend the National Transcontinental Railway Act (4-5 Geo. V, c. 43 and 5 Geo. V, c. 18); Canadian National Railways (172) and amending Acts 1918, c. 13; 1929, c. 10 and 1931, c. 6; Canadian National Railway Branch Lines (14-15 Geo. V, cc. 14-32; 15-16 Geo. V, cc. 5, 6 and 7; 17 Geo. V, cc. 12-26; 18-19 Geo. V, cc. 18-36); Government Employees Compensation (30) and amending Act, 1931, c. 9; Canadian National Refunding, 1927 (17 Geo. V, c. 27); The Canadian National Refunding Act, 1929 (19–20 Geo. V, c. 11); Canadian National (Central Vermont) Financing, 1930 (20-21 Geo. V, c. 7); Canadian National Refunding, 1930 (20-21 Geo. V, c. 8); Grand Trunk Pacific Securities, 1927 (17 Geo. V, c. 7); Canadian National Steamships, 1927 (17 Geo. V, c. 29); Canadian National Railways Pension Act (19-20 Geo. V, c. 4); Canadian National Montreal Terminals Act, 1929 (19-20 Geo. V, c. 12); Maritime Freight Rates Act (79).

The "Railway Act" (Companies) confers certain powers upon the Minister of the Department. In the case of subsidized railways, the authorizing Acts are carried out under the Department, which also has certain jurisdiction where Government guarantee has been given.

Secretary of State.—Companies (27); Naturalization (138); Patents (150); Copyright (32); Unfair Competition (22-23 Geo. V, c. 38); Canada Temperance (196); Boards of Trade (19); Ticket of Leave (197); Trade Unions (202); Treaties of Peace.

Trade and Commerce.—Canada Grain (86) (20-21 Geo. V, c. 5); Copper Bars and Rods Bounty (13-14 Geo. V, c. 40); Electricity and Fluid Exportation (54); Electricity Inspection (55); Electric Units (56); Gas Inspection (82); Hemp Bounty (13-14 Geo. V, c. 50), Inland Water Freight Rates (208); Precious Metals Marking (84) (18-19 Geo. V, c. 40) (19-20 Geo. V, c. 53); Statistics (190); Weights and Measures Inspection (212); Act to place Canadian Coal used in the Manufacture of Iron or Steel on a Basis of Equality with Imported Coal (20-21 Geo. V, c. 6).

Section 3.—Publications of Dominion Departments.

List of Principal Publications of the Departments of the Government of the Dominion of Canada as Compiled from Information Supplied by the respective Departments.

Note.—A catalogue of the official publications of the Parliament and Government of Canada, stating prices, is issued regularly once a year with supplements when required; copies may be obtained from the King's Printer, Ottawa.

Agriculture.—Annual Reports of the Minister, of the Experimental Farms and Stations and of the Veterinary Director-General. Bulletins, pamphlets and circulars of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following Divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botanical; Poultry; Tobacco; Economic Fibre; Bacteriology; Bees; and Illustration Stations. Bulletins of the Dairy and Cold Storage Branch relating to the dairying and cold storage industries in Canada, the making of butter and cheese, dairying experiments, co-operation, etc. Reports, bulletins, pamphlets, etc., of the Live Stock Branch on sheep, swine, poultry, marketing of eggs, wool, etc. Bulletins of the Health of Animals Branch, with Regulations as to contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; maladie du coït; tuberculosis; foot-and-mouth disease; quarantine; and meat inspection. Bulletins and reports of the Seed Branch as to seed-testing, the production and use of seed grains, the Seed Control Act; the Feeding Stuffs Act and the Fertilizers Act. Bulletins and circulars of the Entomological Branch, Household insects, Vegetable insects, Locust control, etc., and instructions to importers of nursery stock. Reports of the Canadian Seed Growers' Association. Fodder and Pasture Plants, by George H. Clark, B.S.A., and M. Oscar Malte, Ph.D., 143 pages, 27 plates, price $1. Farm Weeds, by Clark and Fletcher, 180 pages, noxious weeds and seeds in natural colour, price $2.

Dominion Experimental Farms.—(1) Report of the Director (contains summary of reports of Divisions, Farms and Stations); (2) Animal Husbandry Division; (3) Bee Division; (4) Botanical Division; (5) Chemistry Division; (6) Field Husbandry Division; (7) Illustration Stations Division; (8) Poultry Division; (9) Tobacco Division; (10) Horticultural Division; (11) Cereal Division; (12) Forage Crops Division; (13) Economic Fibre Division and (14) Division of Bacteriology. *Experimental Farms and Stations Reports.*—Agassiz, B.C.; Indian Head, Sask.; Nappan, N.S.; Charlottetown, P.E.I.; Invermere, B.C.; Sidney, B.C.; Brandon, Man.; Morden, Man.; Cap Rouge, Que.; Scott, Sask.; Swift Current, Sask.; Kapuskasing, Ont.; La Ferme, Que.; Kentville, N.S.; Lennoxville, Que.; St. Anne de la Pocatière, Que.; Rosthern, Sask.; Lethbridge, Alta.; Lacombe, Alta.; Summerland, B.C.; Farnham, Que.; Fredericton, N.B. *Experimental Sub-Stations.*—Beaverlodge, Alta.; Fort Vermilion, Alta.; Fort Resolution, N.W.T.; Salmon Arm, B.C.; Fort Providence, N.W.T.; Betsiamites, Que.; Fort Smith, N.W.T.

A pamphlet entitled "List of Publications" contains a list of the publications of the Department, numbering more than 400. These publications include, in addition to the reports, bulletins and pamphlets, on field crops, live stock, dairying, orchard and garden insect and plant diseases, poultry, household and miscellaneous topics. With few exceptions, the publications of the Department are free on application to its Publications Branch.

Auditor General.—Annual Report.

Board of Railway Commissioners for Canada.—Annual Report. Pamphlet containing Judgments, Orders, Regulations and Rulings, issued fortnightly.

Civil Service Commission.—Annual Report, including lists of permanent appointments, promotions and transfers; Classification of the Civil Service of Canada, revised up to Dec. 1, 1930; Regulations of the Civil Service Commission; How Appointments are made in the Public Service; Examinations for Clerks, Stenographers and Typists; Examinations for Customs Service; Examinations for Postal Service; Examinations for Junior Trade Commissioners.

Dominion Fuel Board.—The Dominion Fuel Board was created in 1922 primarily to instigate a thorough study of the underlying causes of recurring fuel shortages in Canada and of the methods by which they may be counteracted. It is composed of officers of the Departments of Mines and of the Interior, and the co-operation of both Departments is given to the Board in its investigations. The following reports and publications have been issued: Interim Report of the Dominion Fuel Board, 1923; Central and District Heating—Possibilities of Application in Canada, by F. A. Combe, 1923; Coke as a Household Fuel in Central Canada, by J. L. Landt, 1925; Smoky River Coal Field, by James McEvoy, 1925; Why You Should Insulate Your Home, by G. D. Mallory, 1927; Dominion Fuel Board, Second Progress Report, 1928; Humidity in House Heating, by E. S. Martindale, 1929; Cards bearing instructions on "How to Burn Coke".

Publications of Mines Branch, Department of Mines, in co-operation with Dominion Fuel Board.—Coking experiments on Coals from the Maritime Provinces, by B. F. Haanel and R. E. Gilmore, 1926; Tests of Various Fuels to Determine their Relative Heating Efficiency, by E. S. Malloch and C. E. Baltzer, 1927; Instructions for Burning Coal, Coke and Peat, 1927; Industrial Fuel and Power Statistics for Ontario, Calendar Year 1925, by E. S. Malloch and C. E. Baltzer, 1928.

Publication of the National Development Bureau, Department of the Interior, in co-operation with Dominion Fuel Board.—The Insulation of New and Old Houses, by G. D. Mallory, 1932.

External Affairs.—Annual Report, Annual Treaty Series.

Finance.—Annual Report on the Public Accounts of the Dominion of Canada. Monthly Statements of the Chartered Banks of Canada. Estimates.

Fisheries.—(Publications marked * are available in either English or French.) *Annual Report including Fish Culture Report. Annual Statistical Report (contains both English and French sections). Fish Culture Report (separately). A Popular Account of Some Canadian Fishes—A. Halkett. *Canada's Fisheries. Map of the Atlantic Coast Provinces showing fishing grounds. Statistics of the Haddock Fishery in North American Waters—A. W. H. Needler. Statistics of the Cod Fishery—O. E. Sette. Fisheries Investigation in Hudson and James Bays in 1914—Melville, Lower and Comeau. Discoloration, Smut or Blackening of Canned Lobsters—Harrison and Hood. Historical Account of the Lobster Canning Industry—R. H. Williams. *Fish Canning in Canada. Fish and Chip Shops. *Fisheries News Bulletin (monthly). Quarterly Bulletin of Sea Fisheries Statistics. *The Salmon Fishery of British Columbia. Report on Fisheries Investigations in Hudson Bay, 1930. *Summary of the Report by Messrs. Cockfield, Brown and Company, Ltd., on the Marketing of Canadian Fish and Fish Products. *Oyster Farming on the Atlantic Coast of Canada. Hardening Mud Bottoms for Oyster Culture (mimeographed bulletin). *Red Discoloration of Cured Codfish. *Factors in the Shipment of Live Lobsters from Eastern Nova Scotia. Investigation into the Natural History of the Herring—Hjort. Fish and How to Cook It (cook book, price 10c).

Various reports and bulletins of the Biological Board of Canada, dealing with fisheries research, are also available for distribution by the Department of Fisheries, but it is necessary that in asking for papers of this group applicants should indicate explicitly the particular research questions in which they are interested.

Geographic Board of Canada.—18th Report, containing all decisions to Mar. 31, 1924; 19th Report, containing all decisions from April 1, 1924, to July 31, 1927, with supplements numbers 1 to 12. "Place-Names of Alberta", 1928, 25c.; "Place-Names of Manitoba", 1931; "Meaning of Canadian City Names", 1922; "Place-Names on Magdalen Islands, Quebec", 1922; "Place-Names of Prince Edward Island with Meanings", 1925, 25c.; "Place-Names in Thousand Islands, St. Lawrence River", 1910; "Place-Names on Anticosti Island, Quebec", 1922; Catalogue and Graphical Index of Maps in the Geographic Board Library, two volumes, 1922, supplement, 1925.

Indian Affairs.—Annual Report. Indian Act, (c. 38, R.S.C., 1927). Schedule of Indian Reserves, 1928, price $1. Indian Treaties and Surrenders, Vols. I, II, III, price $15. Census of Indians in Canada, 1929.

Insurance.—Quarterly Statement showing List of Registered Companies. Annual Abstract of Statements of Insurance Companies in Canada (subject to correction). Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies and Fraternal Benefit Societies). Annual List of Securities held by Insurance, Trust and Loan Companies in Canada, with Department's Valuation thereof. Abstract of Statements of Loan and Trust Companies in Canada. Annual Report of Loan and Trust Companies incorporated by the Dominion.

Interior.—Annual Report. The Department of the Interior issues publications dealing with the work of the following branches: National Parks Branch, including Historic Sites, Migratory Birds, and Tourist Information Bureau. Dominion Forest Service. Topographical and Air Survey Bureau. Dominion Water Power and Hydrometric Bureau. Geodetic Survey of Canada. International Boundary Commission. Dominion Lands Administration, including Northwest Territories and Yukon. Dominion Observatory, Ottawa. Dominion Astrophysical Observatory, Victoria. The publications of the Department were published in detail at pp. 970-978 of the 1932 Year Book. Reports on the work of the above branches may be had, if available, upon application to the Department, Ottawa, Canada.

International Boundary Commission.—*Reports.*—Joint Report upon the Survey and Demarcation of the Boundary between the United States and Canada from the source of the St. Croix River to the St. Lawrence River, 1925, $5; Joint Report upon the Survey and Demarcation of the Boundary between the United States and Canada from the Western Terminus of the Land Boundary along the 49th Parallel, on the west side of Point Roberts, through Georgia, Haro and Juan de Fuca Straits, to the Pacific Ocean, 1921, with accompanying chart, $5; Joint Report upon the Survey and Demarcation of the Boundary between the United States and Canada along the 141st Meridian from the Arctic Ocean to Mount St. Elias, 1918, $5; Report of the International Waterways Commission upon the International Boundary between the Dominion of Canada and the United States, through the River St. Lawrence and the Great Lakes, 1915, with full set of 30 maps, $7.50; Joint Report upon the Survey and Demarcation of the Boundary between the United States and Canada from the Northwesternmost Point of Lake of the Woods to Lake Superior, $5. *Maps.*—From the source of the St. Croix River to the Atlantic Ocean, 18 sheets except sheet No. 13, not yet printed; various scales, sizes 26 by 38 inches, 50c. each; from the St. Lawrence River to the source of the St. Croix River, 61 sheets and index sheet, various scales, 26 by 38 inches, 50c. each; from the St. Lawrence River at St. Regis to the head of Pigeon Bay in Lake Superior, 29 sheets and index sheet, International Waterways Commission, various scales 29½ by 36 inches, 25c. each; Northwesternmost Point of Lake of the Woods to the head of Pigeon Bay in Lake Superior, 36 sheets and index sheet, various scales, 26 by 38 inches, 50c. each; 49th Parallel, Northwesternmost Point of the Lake of the Woods to Point Roberts, 59 sheets, index and profile sheets, scale 1:62,500, size 15 by 30 inches, sheets 1 to 19, 50c. each, sheets 20 to 59, 25c. each; west side of Point Roberts through Georgia, Haro and Juan de Fuca Straits to the Pacific Ocean, 1 sheet, scale 1:200,000, 28 by 41 inches, 50c.; Cape Muzon to

Mount St. Elias, 13 sheets 25 by 29 inches, scale 1:250,000, sheets 1 and 2 not yet published, 50c. each; Preliminary Map—Head of Portland Canal to Stikine River, scale 1:250,000, 24 by 33 inches, 25c. each; 141st Meridian from the Arctic Ocean to Mount St. Elias, 30 sheets, scale 1:62,500 with profile sheets, index sheet and special Arctic Coast sheet, size 18 by 27½ inches, 25c. each; Mount St. Elias to White River Sheet, scale 1:250,000, size 19 by 28 inches, 25c.

These reports or maps may be obtained on application to the International Boundary Commission, Department of Interior, Ottawa. Cheques should be made payable to the Receiver General of Canada.

Justice.—Annual Report of the Superintendent of Penitentiaries.

King's Printer and Controller of Stationery.—The *Canada Gazette*, published weekly, with occasional supplements and extras; subscription in Canada and United States, $8 per annum payable in advance, single copies 20c. each, other countries $10 per annum and 25c. per single copy. Judgments of the Board of Railway Commissioners, semi-monthly, $3 per annum, single copies, 20c. Canada Law Reports, published monthly, yearly subscriptions, $6. Revised Statutes of Canada, 1927 (5 vols.), $10. Annual Statutes, 1928-32, $5 each. Acts, Public and Private, with Amendments to date, 10c. to $1 per copy. Canadian Postal Guide, $1 paper cover, $1.50 cloth cover; including supplements, additional 25c. Parliamentary Debates, "Hansard", issued daily during session, French and English, $3 per session each for House of Commons and Senate Debates; single copies, 5c. Prices of bluebooks are in nearly every case printed upon the front cover and are based practically on cost. They may be ordered direct from the King's Printer, Ottawa. A catalogue of official publications of the Parliament and Government of Canada is issued regularly once a year with supplements when required and copies may be obtained from the King's Printer, Ottawa.

Labour.—*Monthly.*—The *Labour Gazette* (published in English and French) at a subscription price of 20c. per annum. *Annually.*—Report of the Department of Labour (including: Reports of Proceedings under the Industrial Disputes Investigation Act, Conciliation and Labour Act, Employment Offices Co-ordination Act, Technical Education Act, Government Annuities Act, Combines Investigation Act, Old Age Pensions Act, Fair Wages and Eight-Hour Day Act, Unemployment Relief Act, 1930, and Unemployment and Farm Relief Act, 1931). Labour Legislation in Canada as existing on Dec. 31, 1928 (a supplementary report thereto on Labour Legislation is published annually in February or March). Labour Organization in Canada. Organization in Industry, Commerce and the Professions in Canada. Wages and Hours of Labour in Canada. Prices in Canada and other Countries. Strikes and Lockouts in Canada and other Countries. *General Reports.*—Report of Royal Commission on Industrial Relations, bound with Report of Proceedings and Discussions of National Industrial Conference, 1919. Hours of Labour in Canada and other Countries, 1923. Report of Commission appointed under Order in Council (P.C. 1929), Sept. 22, 1923, to inquire into the Industrial Unrest among the Steel Workers at Sydney, N.S. Report of Provincial Royal Commission on Coal-Mining Industry in Nova Scotia, January, 1926. Judicial Proceedings respecting Constitutional Validity of the Industrial Disputes Investigation Act, 1907, and Amendments of 1910, 1918, 1920 and 1925. Legal Status of Women in Canada. The Employment of Children and Young Persons in Canada. *Reports of Investigations under the Combines Investigation Act.*—(1) Investigation into Alleged Combine in the Distribution of Fruits and Vegetables in Western Canada, 1925; (2) Investigation into Alleged Combine amongst Coal Dealers at Winnipeg and other places in Western Canada, 1925; (3) Investigation into Alleged Combine limiting Competition in the Marketing of New Brunswick Potatoes, 1925; (4) Investigation into Alleged Combine in the Manufacture and Sale of Bread in the City of Montreal, 1926 (out of print); (5) Investigation into Alleged Combine in the Distribution of Fruits and Vegetables produced in Ontario, 1926; (6) Investigation by Registrar into the Proprietary Articles Trade Association, 1926; (7) Investigation by Commissioner into the Proprietary Articles Trade Association, 1927; (8) Report of the Commissioner on the Amalgamated Builders' Council, 1929; (9) Report of Commissioner on the Electrical Estimators' Association, 1930; (10) Report of Registrar into Alleged Combine in the Bread-Baking Industry in Canada, 1931; (11) Report of Commissioner on Alleged Combine in the Motion Picture Industry in Canada. *Bulletins in Industrial Relations Series.*—(1) Joint Councils in Industry; (2) Report of a Conference on Industrial Relations, 1921; (3) Joint Conference of the Building and Construction Industries in Canada; (5) Canada and the International Labour Conference; (7) Canadian Railway Board of Adjustment, No. 1, Second Report; (8) National Conference Regarding Winter Employment in Canada; (9) Canadian Railway Board of Adjustment, No. 1, Third Report; (10) Canadian Railway Board of Adjustment, No. 1, Fourth Report; (11) Government Intervention in Labour Disputes in Canada.

Marine.—Annual Report. List of Canadian Shipping. Reports of Expeditions to Hudson Bay, Northern Waters and Arctic Archipelago. Canadian Port Directory. List of Lights, etc., in Canada: (a) Pacific Coast; (b) Atlantic Coast; (c) Inland Waters.

Charts and Publications of the Canadian Hydrographic Service.—Catalogue of Marine Charts, Sailing Directions, Tidal Information and other Canadian Government publications of interest to mariners (free). *Pilots.*—(price $1 per copy payable in advance by P.O. order, express order or marked cheque, only) St. Lawrence Pilot (below Quebec), comprising sailing directions from cap des Rosiers to Quebec, 5th edition, 1929. Supplement No. 2 to above, 1933. St. Lawrence River Pilot, Quebec to Montreal and Richelieu River, 1931. Supplement No. 1 to the above, 1933. St. Lawrence Pilot, Montreal to Kingston and Ottawa River, 1933. Great Lakes Pilot Vol. I (Lake Huron & Georgian Bay) 1933. Great Lakes Pilot, Vol. II (Lakes Ontario, Erie and St. Clair and Welland Canal, Niagara, Detroit and St. Clair Rivers, 1933). Sailing directions for the Canadian shores of lake Superior, 1st edition, 1922. Supplement No. 2 to the above, 1931. Sailing directions for lake Melville and approaches (Coast of Labrador), 1931. Sailing directions for The Hudson Bay route, 1933. British Columbia Pilot, Vol. I, southern portion of the coast of British Columbia from Juan de Fuca strait to cape Caution including Vancouver I. and inner passages, 1st edition 1933. British Columbia Pilot, Vol. II, northern portion of the coast of British Columbia from cape Caution to Portland inlet and Queen Charlotte islands, 1st edition, 1930. Navigating charts. *Reports of the International Waterways Commission.*—On the International Boundary Line through the St. Lawrence river, Great Lakes and connecting waters, 1915. *Tidal and Current Survey Reports.*—(issued free of charge)—Currents in the gulf of St. Lawrence including the Anticosti region, Cabot strait and Northumberland strait. Currents of the southeastern coasts of Newfoundland (out of print). Currents in Belle Isle strait (temporarily out of print). Currents in the entrance to the St. Lawrence estuary. Tables of hourly directions and velocity of currents and time of slack water in the bay of Fundy. Tide levels and datum planes on the Pacific coast of Canada. Tide levels and datum planes in Eastern Canada; giving the levels in 86 harbours and other localities. Tides at the head of the bay of Fundy, with diagrams. Tidal investigations and results; Arctic tides, with map. Tides and tidal streams; a general description of the various types of tide and the behaviour of currents, with plates. Temperatures and densities of the waters of Eastern Canada, with maps. *Tide Tables.*—(issued free of charge) Tide tables for the Pacific coast of Canada including: Juan de Fuca strait, the strait of Georgia, and the northern coast with data for slack water in the navigable passes and narrows and information on currents. Tide Tables for the Atlantic coast of Canada, including: the river and gulf of St. Lawrence, the Atlantic coast, the bay of Fundy, Northumberland and Cabot straits, and information on currents. Abridged edition for Quebec, Father point and the St. Lawrence river. Abridged edition for Saint John, N.B., and the bay of Fundy (with time of high water at Windsor, N.S.). Abridged edition for Halifax, N.S. and Sydney, N.S. Abridged edition for Charlottetown, P.E.I., Pictou, N.S., St. Paul I. with tidal differences for north shore of Prince Edward I., Sydney, Northumberland strait, Cape Breton, Magdalen Is., etc. Abridged edition for Vancouver, Sand Heads and the strait of Georgia, B.C. Abridged edition for Prince Rupert, B.C., with tidal differences for the northern coasts of British Columbia. Slack water tables for the strait of Canso and Great Bras d'Or lake, N.S., Slack water tables for first Narrows, Vancouver harbour, Active pass and Turn point, B.C. (Mimeograph copies of tide tables for Churchill harbour, Port Nelson, Hudson bay and Moosonee, Moose River, James bay.)

Charts of the Canadian Hydrographic Survey.—(Price 50 cents each.) Nearly four hundred charts and plans are published of the Atlantic coast and its harbours, Hudson bay, Hudson strait and harbours and anchorages, the St. Lawrence river, the Ottawa river, lake Ontario and harbours, lake Erie and harbours, lake Huron and Georgian bay and harbours, lake Superior and harbours, lake of the Woods, lake Winnipeg, Nelson river, Great Slave lake, Pacific coast and harbours. There is also a number of International Waterways Commission charts, not intended for navigation.

Radiotelegraph Branch.—Maps showing the Radiotelegraph and Radiotelephone coast stations in the Dominion of Canada. Postmaster-General's Handbook for Radiotelegraph Operators (Instructions *re* handling of traffic, etc.). Radiotelegraph Act and Regulations issued thereunder. Circular letter to Canadian Broadcast Listeners *re* Interference from the Regenerative Receiving Set. Official List of Radio Stations in Canada (price 25 cents).

Mines.—The scientific and investigatory work of the Department of Mines, which is chiefly concerned with the development of the Dominion's mineral industries, is carried on by the Department's four principal branches—the Geological Survey, the Mines Branch, the National Museum of Canada and the Explosives Division.

The Geological Survey carries on areal and economic investigations and research work in geology and mineralogy; the Mines Branch carries on field, laboratory, and industrial investigations covering the various phases of the mining and metallurgical industries from the primary occurrence of the ores to the utilization of the finished products; the National Museum of Canada carries on scientific investigations in all branches of natural history; and the Explosives Division, under the provisions of the Explosives Act (R.S.C., 1927, c. 62) has supervision of the manufacture, testing, storage and importation of explosives and issues the licences and permits authorized by the Act.

The Department of Mines publishes an annual administrative report covering the activities of the whole Department, and occasional pamphlets illustrating the services rendered the mining and metallurgical industries. Each of the branches publishes annual reports in addition to memoirs and bulletins on special investigations and districts.

The Geological Survey Branch.—From 1842 to 1904, published annual volumes. From 1904 to 1910, upwards of 80 reports were issued, all separately. Since then the publications have consisted of memoirs and bulletins appearing at irregular intervals, an annual summary report and miscellaneous publications, including geological and topographical maps, geological guide books and handbooks. The subjects dealt with include areal and economic geology of particular districts, mineralogy, palæontology and related topics. In 1926 the first volume of a new Economic Geology Series was published, and further volumes of this series have since been issued. A list of the reports published by this branch may be obtained on application to the Director, Geological Survey, Ottawa.

The National Museum of Canada has published a series of *Museum Bulletins* in many branches of natural history. A list of these may be obtained on application to the Director, National Museum of Canada, Ottawa.

The Mines Branch, since its inception in 1908, has published annual summary reports covering the investigations of the Divisions of Mineral Resources, Ore Dressing and Metallurgy, Fuels and Fuel Testing, Ceramic and Road Materials and Chemistry. More detailed and comprehensive reports have also been published by this branch, dealing with the technology of most of the economic minerals of Canada. A list of the Mines Branch reports may be had on application to the Director, Mines Branch, Ottawa.

The Explosives Division has published annual reports since 1919 and a number of pamphlets on the proper care and handling of explosives. Copies may be obtained on application to the Chief Inspector of Explosives, Department of Mines, Ottawa.

The publications of the Department of Mines cover all phases of mining from preliminary explorations and surveys of unmapped territory through the mining, milling, smelting and refining of the ores to the marketing and utilization of the finished product. Most of these reports and maps may be obtained free of charge by those interested on application to the Deputy Minister of Mines, Ottawa, or to the Directors of the Branches concerned, whose addresses are given above. Many of these reports may be had in French translations.

National Defence.—Annual Report, Militia and Air Services; Annual Report, Naval Service; Report on Civil Aviation; List of Officers, Defence Forces of Canada, Naval, Military and Air Services; Canadian Navy List; Naval General Orders; General Orders, Militia and Air Services; Militia Orders; Air Regulations.

National Research Council.—*Annual Reports.*—Reports of the National Research Council for the years 1917-18 to 1931-32. *Technical Reports.*—(For Nos. 1 to 21 see p. 1042 of the 1927-28 Year Book. Nos. 4, 6 and 12 are now out of print.) No. 22, An Experimental Study of Sieving, by J. B. Porter, Ph.D., D.Sc.; No. 23, The Storage of Apples in Air-cooled Warehouses in Nova Scotia, by S. G. Lipsett, Ph.D., covering investigation by Associate Committee on Fruit Storage; No. 24, The Drying of Wheat, covering an investigation by the Associate Committee on Grain Research; No. 25, The Drying of Wheat (Second Report), by E. Stansfield and W. H. Cook, covering an investigation under the Associate Committee on Grain Research; No. 26, Weed Survey of the Prairie Provinces, by J. M. Manson, prepared under the auspices of the Associate Committee on Weed Control; No. 27, Weeds and Their Control, a popular account prepared under the auspices of the Associate Committee on Weed Control, by G. P. McRostie, L. E. Kirk, G. Godel, W. G. Smith and J. M. Manson; No. 28, Report on Comparative Feeding Values for Livestock of Barley, Oats, Wheat, Rye and Corn, by E. W. Crampton. *Bulletins.*—(For Nos. 1 to 12, see p. 1042 of the 1927-28 Year Book, Nos. 3, 4, 6, 7, 9, and 11 are now out of print.) No. 13, Interim Report on Protein Content as a Factor in Grading Wheat, prepared by the Associate Committee on Grain Research; No. 14, Report on Inquiry in Europe Regarding the Feasibility of Using Protein Content as a Factor in Grading and Marketing Canadian Wheat, by R. Newton, Ph.D.; No. 15, Review of Literature dealing with Health Hazards in Spray Painting, submitted by the Associate Committee on Spray Painting. *Periodical*—Canadian Journal of Research, published monthly since May, 1929.

National Revenue.—Annual Report, containing statements relative to Imports, Exports, Excise and Income. Annual Report of Shipping. National Revenue Review (monthly).

Pensions and National Health.—(2) The Canadian Mother's Book; (3) How to Take Care of the Baby; (4) How to Take Care of the Mother; (5) How to Take Care of the Children; (6) How to Take Care of the Father and the Family; (7) Beginning a Home in Canada; (8) How to Build the Canadian House; (9) How to Make the Canadian Home; (10) How to Make Outpost Homes in Canada; (11) How to Avoid Accidents and Give First Aid; (12) Canadians Need Milk; (13) How we Cook in Canada; (14) How to Manage Housework in Canada; (15) How to Take Care of Household Waste; (16) Household Cost Accounting in Canada; (19) Athlete's Foot; (23) Venereal Diseases—Diagnosis and Treatment; (24) Information for Men—Syphilis and Gonorrhœa; (25) Information for Young Women about Sex Hygiene; (26) Information for Parents—Teaching of Sexual Hygiene to Children; (27) Prevention of Blindness in Babies; (28) Periodic Medical Examinations; (29a) Goitre—Facts for the General Public; (30) How to Build Sound Teeth; (31) What

You Should Know About Tuberculosis; (32) Smallpox and Vaccination; (33) Narcotism in Canada; (41) Keep the Family Well; (43) Rickets; (51) Be Prepared to Prevent Infantile Paralysis; (53) Maternal Care.

(NOTE.—Publications 23 and 28 are for the *Medical profession only*.)

Post Office.—Annual Report of the Postmaster General. Official Postal Guide. Regulations as to Rural Mail Delivery. Booklet of Postal Information.

Public Works.—Annual Report.

Railways and Canals.—Annual Report of the Department; Canals of Canada; The Trent Canal System; Canal Rules and Regulations; Port Colborne Elevator Tariff and Regulations; Prescott Government Grain Elevator Tariff.

Secretary of State.—Annual Report. The Arms of Canada.

Trade and Commerce. (NOTE.—Requests for those publications marked with an asterisk should be addressed to the King's Printer; the remaining publications may be obtained from the Deputy Minister, Department of Trade and Commerce.)

*Annual Report of the Dept. of Trade and Commerce, 25c.; *Annual Report of the Board of Grain Commissioners for Canada, 25c.; *Annual Report of Electricity and Gas, 25c.; *Annual Report of Weights and Measures, 10c.; Annual Reports, Dominion Grain Research Laboratory, 1928-29-30-31; *Canada-West Indies Conference, 1925, with text of Canada-British West Indies-Bermuda-British Guiana-British Honduras Trade Agreement (1925), $1; Electrical Standards and their application to Trade and Commerce; *List of Licensed Elevators, etc., 50c.; Motion Pictures (catalogue of), 25c.; Precious Metals Marking Act, Office Consolidation, 10c.

Publications of the Commercial Intelligence Service.—Commercial Intelligence Journal Weekly (in English and French), containing Reports of Trade Commissioners and other Commercial Information. Annual subscription: In Canada, $1; single copies, 5c. Outside Canada, $3.50; single copies, 10c. (NOTE.—Subscribers to the Commercial Intelligence Journal are entitled to receive all other publications of the Commercial Intelligence Service free of charge); Australian Market for Fish Products (1931); Denmark as a Market for Canadian Products (1926) 25c.; Foreign Markets for Canadian Certified Seed Potatoes (1930) 25c.; French-Canadian Homespun Industry; Greece as a Market (1931) 25c.; Indian Empire as a Market for Canadian Products (1922) 25c. Invoice Requirements—Leaflets covering the following countries: Argentina, Australia, Belgium, Bolivia, Brazil, Central American Republics, Chile, China, Colombia, Cuba, Denmark, Ecuador, Finland, France, Greece, Holland, India, Italy, Japan, Mexico, Netherlands East Indies, New Zealand, Norway, Peru, South Africa, Switzerland, Turkey, Uruguay, and Venezuela. Yugoslavia as a Market (1930) 25c.; Map of the World showing Trade Routes (1930 Edition); Markets of Central America (1929) 25c. Points for Exporters—Leaflets covering the following countries: Australia, Belgium, the Bahamas, Brazil, British Honduras, China, Colombia, Cuba, Egypt, France, Germany, Haiti, Hong Kong, India, Jamaica, Japan, Mexico, British Malaya and Siam, Netherlands, Netherlands East Indies, New Zealand, Panama, South Africa, British West Indies, Venezuela and the United Kingdom. Republic of Chile: Its Economic Condition and Trading Opportunities (1923) 25c.; South American Markets (1929); Sweden as a Market for Canadian Products (1928) 25c.; Switzerland as a Market (1929) 25c.; Trade of the African Sub-Continent (1928) 25c.; Trade Possibilities of the Baltic States (1929) 25c.; Trading with Colombia and Venezuela (1928) 25c.; West Africa and its Opportunities for Canadian Trade (1921) 25c.

Dominion Bureau of Statistics.—For the publications of the Dominion Bureau of Statistics see pp. 1064 to 1071.

Section 4.—Publications of Provincial Governments.

PRINCE EDWARD ISLAND.

Journal of the Legislative Assembly. Statutes. General Index of Statutes of P.E.I., 1869-1928. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts, Departments of Public Works and Highways, Education, Agriculture, Falconwood Hospital (for the Insane) and Provincial Infirmary, Vital Statistics and Public Health.

NOVA SCOTIA.

Royal Gazette. Statutes, Journal and Proceedings of the House of Assembly. Journal of Education. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction. Annual Reports on Public Accounts, Public Health—Vital Statistics, Statistics of Incorporated Towns and Municipalities, Education, Fire Marshal, Mines, Provincial Museum, Rural Telephones, Humane Institutions, Public Charities (including reports of hospitals and the Sanatorium), Penal Institutions, Child Welfare, Temperance, Printing, Legislative Library, Public Utilities Board and Workmen's Compensation Board, Provincial Secretary, Department of Agriculture (including Factory Inspector), Department of Highways, Department of Lands and Forests, and the Power Commission. Special Report of Royal Commissioner on the Apple Industry. Duncan Coal Commission. Special Report on Gaols.

NEW BRUNSWICK.

Royal Gazette. Statutes. Annual Reports of the Auditor-General, of the Board of Health, of the Department of Education and Agriculture (including Horticulture). Annual Reports on Public Works, Crown Lands, the Hospital for the Insane, Report of the Jordan Memorial Tuberculosis Sanatorium at River Glade, Report of Women's Institutes, Report of the Workmen's Compensation Board, Report of Public Utilities Commission, Report of N.B. Hydro-Electric Power Commission, Boys' Industrial Home, Saint John, Report and N.B. Liquor Control Board Report.

QUEBEC.

NOTE.—The titles of publications available in the English language are printed in English.

Attorney General.—Annual List of Public Officers of the Province of Quebec.

Municipal Affairs.—Annual Report of the Minister of Municipal Affairs, Municipal Bulletin (monthly); List of Municipal Corporations (annual); List of School Municipalities, Schools and Teaching Staff (annual); Statistical Year Book; Education Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Judicial Statistics (annual); Statistics of the Penal Establishments (annual); Statistics of the Benevolent Institutions (annual).

Provincial Secretary.—Annual Report of the Secretary and Registrar; Annual Report of the Provincial Bureau of Health; The Official Gazette of Quebec, bilingual (weekly); The Statutes of the Province (annual); Revised Statutes of the Province (1925); Rapport de l'Archiviste (annual); Monuments commémoratifs de la province de Québec. P.-G. Roy; Report of the Director of Public Charities.

Treasury.—Annual Statement of Public Accounts; Annual Estimates; Annual Budget Speech; Annual Report on Insurance Companies; Annual Report on Mutual Benefit Associations; Annual report on Trust Companies.

Bureau of Revenue.—Annual Report of the Quebec Liquor Commission; Annual Report on Motor Vehicles Registrations; Statistics of Automobile Accidents.

Lands and Forests.—Annual Report of the Minister; La Forêt, Fernow, 1905; Dictionnaire des lacs et rivières de la province de Québec, Eugène Rouillard, 1914; Circular No. 1, La rouille vésiculaire du pin blanc, G.-C. Piché; Nomenclature of the Geographical Names in the Province of Quebec, Quebec Geographical Commission; Dictionnaire des Lacs et Rivières; Annual Report of the Quebec Streams Commission; Notes on the Forests of Quebec, G.-C. Piché; Forêts et chutes d'eau de la province de Québec; Rapport du Service de Protection; Tableau des forces hydrauliques concédèes de 1867 à 1923 (Supplément 1923 au 7 avril 1930); Forests and Waterfalls; Quebec, Natural Resources.

Agriculture.—*Annual Reports.*—Department of Agriculture: Competition for Agricultural Merit; Dairymen's Association; Pomological Society: Society for Protection of Plants. Journal of Agriculture and Horticulture, illustrated, monthly. *Bulletins.*—(1) Plans for Cheese and Butter Factories; (15) Culture du blé-d'Inde; (55) Poultry Raising in Towns and Villages; (63) La culture des arbres fruitiers; (40) How to plant your Fruit Trees; (43) Bean Culture; (44) Vegetable Culture; (45) List of Presidents and Secretaries of Agricultural Societies; (67) Insects nuisibles aux animaux de la ferme; (69) Enemies of Gardens and Orchards; (72) Nos érablières; (73) Instructions to School Farmers; (78) Farm Gas Engines; (83) L'élevage des dindons; (84) L'élevage des oies et canards; (87) La culture des pommes de terre; (89) The drainage of Farm Lands; (90) Experiments with Grain Crops; (92) The Corn Borer; (95) Comptabilité Agricole; Farm Account Book; (96) La remise à fumier: (100) Soils Drainage; (101) La luzerne; (102) Les conserves; (103) Les mauvaises herbes; (104) Les engrais chimiques; (106) Améliorer une ferme; (107) Maladies du bétail laitier. (108) Maladies du cheval; (109) Elevage du porc à bacon; (110) La pomme de terre; (111) Les abeilles; (112) Les bonnes semences; (113) Teinturerie domestique. *Circulars.*—(42) Sélection des troupeaux de volailles; (125) Guide des cercles de fermières; (65) Common weeds and their control; (66) Alfalfa growing in Quebec; (72) Loi des mauvaises herbes. *Miscellaneous.*—(107) Ventilation des étables; (108) Orientation de la culture maraîchère; (117, 118, 119) Plans de poulaillers; (136) Lois sur l'agriculture; (138) Lois-Conseil d'Agriculture; (159) Brochure—Mangeons du fromage; (164) Dairy farming; (165) Statuts et règlements des co-opératives; (184) Tableau des mauvaises herbes; (291) Cent poules par ferme; (293) The Maple, Pride of Quebec.

Highways.—Note.—Publications marked (1) are bilingual; (2) Separate French and English editions; (3) English only.

(1) Annual Report of the Minister of Highways; (2) An Act Respecting the Roads Department (1931); (2) Official Bulletin of the Roads Department (issued semi-monthly during the summer season and monthly during winter); (1) Official Highway and Tourist Map (1932); Tours in Quebec (80 pp. guide illustrated); (3) Laurentian Tours (32 pp. guide illustrated); (3) Montreal-Quebec (12 pp. illustrated); (3) The Eastern Townships (12 pp. illustrated); (3) Lake St. John and National Park (12 pp. illustrated); (3) The Old World at your Door; (3) The Gaspé Peninsula (32 pp. de luxe booklet); (3) Quebec, the Good Roads Province; Quebec, the Holiday Seeker's Playland (16 pp. illustrated booklet); (2) Gaspé Peninsula (260 pp.—complete guide—illustrated); (2) Along Quebec Highways (900 pp.—illustrated—price $2).

Mines Branch.—Esquisse géologique et minéraux utiles de la province de Québec (1927); Iron Ores of the Province of Quebec, by P. E. Dulieux (1915); Extracts from Reports on the District of Ungava, by T. C. Denis (1915); Report on the Copper Deposits of the Eastern Townships, by J. Austen Bancroft (1916); L'industrie de l'amiante dans la province de Québec (1917); Report on Gold Deposits of Lake Demontigny, by Ad. Mailhiot (1922); Geological Sketch and Economic Minerals of the Province of Quebec (1924); Annual Reports on Mining Operations in the Province of Quebec.

Colonization, Game and Fisheries.—Annual Report of the Minister; Report on Repatriation; Fisherman's Paradise; The Laurentide National Park; Elevage du rat musqué; Fur Farming in the Province of Quebec, 1921; Le Guide du colon, 1932; Quebec Ready Reference, 1931.

Labour.—Minister's Report; Workmen's Compensation Act; Annual Report of the Workmen's Compensation Commission; Report of the Quebec Social Insurance Commission.

Public Works.—Minister's Report; Statistics of Fire Losses in the Province.

Public Instruction.—Code scolaire (1927); School Law (1927); An Act respecting the Department of Education (1925); Regulations of the Catholic Committee (1930); Regulations of the Protestant Committee (1926); Memoranda of Instructions to Teachers for Intermediate and High Schools (1925); Annual Report: Financial Statement of the Superintendent of Public Instruction (annual): Mon premier livre (1st and 2nd parts) (1900), a fresh edition of which is printed every year; l'Enseignement primaire; Educational Record; Yearly circulars containing Instructions to School Boards and School Inspectors; Course of English and French for English Catholic Schools (1926); Manual respecting the course of study in the Protestant Elementary Schools; List of authorized text books.

Legislative Council.—Agenda Paper of the Legislative Council; Votes and Proceedings of the Legislative Council; Journals of the Legislative Council; Rules and Regulations of the Legislative Council.

Legislative Assembly.—Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Sessional Papers, Departmental Reports and Returns to Orders and Addresses of the Legislative Assembly; Report of the Clerk of the Crown in Chancery on Elections (published after every general election); Report of the Librarian of the Legislature; Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Government and Legislature; List of the Chairmen and Members of the Committees of the Legislative Assembly.

ONTARIO.

Agriculture.—*Annual Reports.*—Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental Union; Stallion Enrolment Board; Agricultural Statistics; Bee-keepers' Association; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Annual Report of Ontario Veterinary College. *Bulletins.*—(337) Parasites Injurious to Sheep; (338) Hints on Judging Live Stock, Poultry, Grains, Grasses and Roots; (342) Fire Blight; (343) New Fruits; (344) Fruit Tree Diseases; (345) Fungus and Bacterial Diseases of Vegetables; (346) Hardy Alfalfa; (347) Hay and Pasture Crops; (348) Amateur Dramatics; (350) Warble Fly; (352) Potatoes; (354) The Pear; (355) The Raspberry and Blackberry; (356) Insects attacking Fruit Trees; (357) Top Working and Repair Grafting, including Budding; (358) The European Corn Borer; (359) Insects attacking Vegetables; (361) Farm Water Supply and Sewage Disposal; (363) Parasites injurious to Poultry; (364) Manures and Fertilizers; (365) Horses; (366) Soy beans in Ontario; (367) Pork on the Farm; (368) Farm Poultry; (369) Vegetable Gardening; (370) Testing Milk, Cream, and Dairy by-products; (371) Butter-making on the farm; (372) Soft Cheese and Cheddar Cheese; (373) Dairy Cattle; (374) Use More Ontario Honey; (375) Ontario-Grown Head Lettuce; (For previous bulletins, see p. 1046 of the 1927-28 Year Book.) *Specials* (without serial numbers).—Food for the Family.

Attorney General.—Reports of Inspectors; Legal Officers; Registry Offices; Insurance; Division Courts. Annual Reports of Liquor Control Board and Commissioner of Provincial Police. Powers and Duties of Justices of the Peace in Ontario (handbook).

Education.—Annual Report of the Minister of Education. School Acts. Regulations and Courses of Study: (1) Public and Separate Schools; (2) Continuation Schools; (3) High Schools and Collegiate Institutes; Courses of Study and Examinations in Schools Attended by French-speaking Pupils; School Cadet Corps; General Announcement of Summer courses; Text Book Regulations, including list of text books authorized and their prices; The list of school manuals with their prices; Summer Schools for Training of Teachers; English-French Training Schools; Syllabus of Normal School Courses and Regulations for First and Second Class and Kindergarten-Primary Certificates; List of Teaching Days of High, Continuation, Public and Separate Schools; Recommendations and Regulations for Vocational Schools, etc.; Recommendations and Regulations for Agriculture and Household Science Departments; High School Entrance Examination Regulations; Announcement *re* the Carter Scholarships; The Penny Bank of Ontario; The School Attendance Acts and the Recommendations and Regulations and the Part Time Courses; The Consolidation of Rural Schools; Suggestions for Teachers of Subnormal Children; Accommodation, Equipment and Grants for Auxiliary Training Classes; Literature Selections for Departmental Examinations; Regulations, Medical and Dental Inspection, Public and Separate Schools.

Game and Fisheries.—Annual Report, Department of Game and Fisheries: Ontario Game and Fisheries Laws; Summary of the Ontario Game and Fisheries Laws; Practical Observations on the Fox and Proven Treatments of Common Ailments; The Mink in Captivity; Report of the Special Fish Committee, 1928–30; Report of the Special Game Committee, 1931-33; The Small-mouthed Black Bass and its Conservation; The Maskinonge and its Conservation; The Speckled Trout and its Conservation.

Health.—*Acts.*—The Public Health Act and The Vaccination Act; The Venereal Diseases Prevention Act; The Cemetery Act; The Public Hospitals Act; The Private Hospitals Act; The Sanatoria for Consumptives Act; The Maternity Boarding House Act. *Regulations.*—Regulations for the Control of Communicable Diseases; Regulations Respecting Venereal Diseases; Regulations Respecting the Manufacture of Non-Intoxicating Beverages, Distilled and Mineral Water, and the Manufacture of Syrup, Wines and Brewed Beer; Regulations for the Sanitary Control of Lumber and Mining Camps; Regulations Governing the Construction and Management of Swimming Pools; Regulations *re* Cross Connection of Water Supplies. *Publications.*—Numerous pamphlets on The Baby, Cancer, General Clinic Service, Habit Training, Home Training, Speech Training, Special Problems and Venereal Diseases, may be obtained from the Director of Hospital Services, Ontario Department of Health, Toronto. A full list of these is published annually in the Health Almanac.

Highways.—Annual Report; Annual Proceedings, Ontario Good Roads Associations; (15) Highway Traffic Act and Regulations; (16) General Specifications for Concrete Highway Bridges, 1920; (17) General Specifications for Steel Highway Bridges, 1923; (19) General Plans for Steel Highway Bridges, 1917; (22) Report on Street Improvement, 1917; (34) The Planting and Care of Roadside Trees, 1923; (35) Public Commercial Vehicles Act, 1931; Public Vehicle Act and Regulations; Consolidated Highway Improvement Act, 1931; Official Government Road Maps of Ontario, price 25c. each.

Labour.—*Legislation.*—Department of Labour Act; Factory, Shop and Office Building Act; Steam Boiler Act; Canadian Interprovincial Regulations for the Construction and Inspection of Boilers, Tanks and Appurtenances; Operating Engineers Act and Regulations Governing the Issuance of Certificates; Employment Agencies Act and Regulations Governing Employment Agencies; Apprenticeship Act and Regulations Governing the Training of Apprentices in the Building Trades; Regulations Respecting the Protection of Persons Working in Compressed Air; Regulations Respecting the Protection of Persons Working in Tunnels or Open Caissons; Minimum Wage Act; Orders of the Minimum Wage Board. *Reports.*—Annual Report of the Department of Labour, including the reports of the General Superintendent of the Ontario Government Offices of the Employment Service of Canada, Chief Inspector of Factories, Chief Inspector of Steam Boilers, Chairman of the Board of Examiners of Operating Engineers, and of the Inspector of Apprenticeship; Annual Report of the Minimum Wage Board. *Booklets.*—Department of Labour of Ontario; Why Certificates for Stationary and Hoisting Engineers?; Boilers, Engines, Turbines and Condensers; Beginners' Book on Power Plant Operation; Survey of Industrial Welfare in Ontario.

Lands and Forests.—(Free distribution.) Annual Report. Folder on Northern Ontario Settlers' Lands and Colonization. Folder on Summer Homes, Tourists and Campers in Ontario. The Forest Trees of Ontario (25c.). Woodlots of Ontario. Tree Planting, Ontario. Water Powers of Ontario (50c.). The Ferguson Highway. The Sault Ste. Marie-Pembroke Road. Forestry in Ontario. Gathering Pine Cones. Trees for Schools. Northwestern Ontario Highways and Tourist Attractions (50c.). Forest Resources of Ontario.

Mines.—The Mining Act, R.S.O., 1927, with Amendments from 1928 to 1932 inclusive. Handbook—Ontario's Mines and Mineral Resources, Fifth Edition, 1931. Bulletin 88, Preliminary Report of the Mineral Production of Ontario in 1931; Report of Royal Ontario Nickel Commission, 1917; Report of Ontario Iron Ore Committee, 1923; Volume XXX, Part II, Ontario Gold Deposits; Volume XXXIII, Part II, 1924, Porcupine Gold Area; Final Report of Joint Peat Committee, 1925; Volume XXXVII, Part II, 1928, Kirkland Lake Gold Area; Volume XLI, Part I, 1932, Statistical Review and Mines of Ontario in 1931; Bulletin No. 25, List of Publications (Third Edition), giving all reports issued up to March, 1932; Bulletin No. 80, Money and the World Crisis; Bulletin No. 83, Twenty-five Years of Ontario's Mining History.

Premier.—Reports of the Hydro-Electric Power Commission of Ontario and the Temiskaming and Northern Ontario Railway Commission. Tourists' Handbook. Report of the Queen Victoria Niagara Falls Park Commission.

Provincial Secretary.—Annual Reports: Ontario Board of Parole; Prisons and Reformatories; Annual Report of the Secretary and Registrar of the Province of Ontario (this report is presented to the Legislative Assembly each year, but has not been printed for several years). The Companies Act, including the Extra-Provincial Corporations Act. The Mortmain and Charitable Uses Act and the Companies Information Act. The Co-operative Credit Societies Act. The Marriage Act. Vital Statistics Act. Physicians' Pocket Reference to the International List of Causes of Death. Annual Report of Births, Marriages and Deaths. The Physicians' Pocket Reference to the International List of Causes of Death is published by the Dominion Bureau of Statistics but copies are kept in this Branch for purposes of distribution.

Public Works.—Annual Report of the Minister, with reports of the Deputy Minister, Architect's Engineer, Statements of Secretary and of Accountant.

Treasury.—Annual Statements; Main, Supplementary and Further Supplementary Estimates of Expenditure; Public Accounts; Budget Address of Treasurer delivered in the Legislative Assembly; Auditors' Report; Bureau of Archives Report; Report of the Board of Censors of Motion Pictures.

MANITOBA.

Agriculture.—*Booklets.*—Annual Crop and Live Stock Reports; Map of the Province; Calendar of the Manitoba Agricultural College. *Bulletins and Circulars.*—Alfalfa and Sweet Clover Growing in Manitoba; Sweet Clover; The Trench Silo; Making Silage in Manitoba; The Canada Thistle; Leafy Spurge; Noxious Weeds Act; How to Kill Couch Grass; Dealing with the Weeds Problem in Manitoba; Questions and Answers about the Sow Thistle; Control of Wild Oats; Preparing Grain for Exhibition Purposes; Good Seed Pays; Perennial Sow Thistle and What Can be Done to Control It; The Root Crop in Manitoba; Forage Crop Calendar; Prevention of Cereal Smuts; Growing Better Potatoes; Milk and Cream Tests; The Nutrition of the Family; Cream Profits; Farm Butter-Making; Cheese-Making on the Farm; The Cream Separator on the Farm; Home Made Brooders; Fattening, Killing, Dressing and Marketing Chickens; Horses in Manitoba; Sheep in Manitoba; Have You Dehorned your Market Cattle?; Standards for Flower Judging; The Peony; The Gladiolus; Shrubs for Manitoba; Success in Growing Annuals; Growing Vegetables in Manitoba; Vegetable Insects and their Control; Growing Better Rhubarb; The Gladiolus for Exhibition; Debates and Public Meetings; Meat Curing Recipes; Help for the Home Dressmaker; Fitting and Alteration of Dress Patterns.

Education.—Annual Report; Empire Day Booklet; Consolidation of Schools; Program of Studies, Elementary and Senior; Public School Act; Regulations.

Municipal Commissioner.—Statistical information respecting the Municipalities of the Province; Tax Arrears and other Information, and list of names and addresses of administrative and health officials of each Municipality. Report of Municipal and Public Utility Board. Manitoba Tax Commission.

Public Works.—Annual Report, included in Sessional Papers. Report of Insurance.

Attorney-General.—Annual Report. Government Liquor Commission. Workmen's Compensation Board. Annual Report of Manitoba Telephone System.

Provincial Treasurer.—Public Accounts; Estimates; Budget Speech; Report of Manitoba Farm Loan Association.

Provincial Secretary.—*Manitoba Gazette;* Journals and Sessional Papers. Statutes of the Province.

Mines and Natural Resources.—Manitoba Mines and Minerals; Mining Maps; Sectional Land Maps.

Health and Public Welfare.—Annual Report; Manitoba Mother: Monthly Pre-natal and Post-natal letters; Manitoba Baby; Manitoba Child; Child Study Material for small community groups; Patterns for Infants' Layettes (10c.); Regulations *re* Boarding Homes for Children, Maternity Homes, and Day Nurseries; Quarantine Regulations; The Common Cold; Measles; Scarlet Fever; Diphtheria; Diphtheria Immunization; Whooping Cough; Trachoma; Typhoid Fever; Health Training Material for Teachers; Report of the Royal Commission on Child Welfare Division; Report on the Poliomyelitis (Infantile Paralysis) Epidemic in Manitoba, 1928. Report on Hospitals and Nurses Training Schools in Manitoba —May 1929.

Publications issued by the Dominion Department of Pensions and National Health, The Canadian Council on Child Welfare, The Canadian National Institute for the Blind, also used in educational service.

SASKATCHEWAN.

Agriculture.—Annual Report of the Department of Agriculture. Annual Reports of Branches, etc.: Dairy, Live Stock, Field Crops, Statistics, Extension Department of College of Agriculture. Commission Reports: Live Stock Marketing, Better Farming, Wheat Marketing. Bulletins and leaflets on Live Stock, Field Crops, Dairying, Farm Buildings, Tillage Methods, etc.

Other Publications.—Sessional Papers. Annual Reports: Department of Railways, Labour and Industries; Department of Education; Department of Highways; Department of Municipal Affairs; Department of Provincial Secretary; Department of Public Works; Department of Public Health; Department of Telephones; Department of Natural Resources; Local Government Board; Public Accounts; Cancer Commission; Research Foundation· Mental Hospitals; The *Saskatchewan Gazette*. By Bureau of Publications: Weekly News Bulletin; Pamphlets on Saskatchewan—Legislation, Natural Resources, etc.

ALBERTA.

Agriculture.—Annual Report of the Department of Agriculture; The Ploughing Match; Summer-fallow in Southern Alberta; Sowing Good Seed; Weeds of Alberta; Weeds Poisonous to Live Stock; Soil Cultivation; Destruction of Gophers; Sheep in Alberta; School Fairs' Calendar; Agricultural Schools' Calendar; Growing Feed in Southeastern Alberta; Turkey Breeding and Management; Fur-bearing Animals and their Management.

Attorney-General.—Annual Report on Dependent and Delinquent Children.

Education.—Annual Report; Courses of Studies for Elementary Schools; Regulations *re* Public School Leaving Examinations; Regulations *re* Examinations for Secondary School Grades; Handbook for Secondary Schools; Promotion Tests for Grades V, VI, VII, VIII and IX; Departmental Examinations for Grades X-XII; Pamphlets on Picture Study; Architecture and Sculpture; Summer School Announcement; Course of Studies and Examinations for Commercial Diplomas; Normal School Announcement; Night Class Instruction in Mining Centres; Technical Education in Mining Centres; Bulletin and Regulations covering School Buildings in Rural and Village School Districts: Series of Plans and Specifications for Teachers' Residences; Series of Plans for one- and two-roomed Schools, with Specifications; The Certification of Teachers in Alberta; Annual Announcement of the Provincial Institute of Technology and Art; Courses of Study for pre-vocational classes; Courses of Study for Technical High Schools; School Act; Geography Manual for High Schools; Physical Education for Rural Schools; Physical Education for Secondary Schools; Rural Education in Alberta; High Schools Civics; Seat Work Problems for Junior Grades.

Lands and Mines.—Annual Report; Annual Report of the Chief Inspector of Mines; Alberta Oil Conditions, 1932; Handbook for information of public containing information on the following: the Survey System, Homestead Entries, Grazing on Provincial Lands, Hay Permits, Cultivation Permits, Irrigation, Leasing for Recreation Grounds or Exhibition Sites, Timber Licences and Permits, Timber Permit Berths, Fire-killed Permit Berths, Damaged Timber Berths, Liability of Persons cutting Timber without Authority, Permit Dues, Telegraph and Telephone Poles, Mining Timber Dues, Persons Exempted from Timber Dues, Timber for Homesteads, Fur-Farming Leases, Issue of Permits to Mine Coal, Coal-Mining Leases, Petroleum and Natural Gas Regulations, Carbon-black Permits, Placer Mining, Quartz Mining, Permits to remove Sand, Stone and Gravel from Beds of Rivers and Lakes, Dredging Leases, Disposal of Bar-Diggings, Alkali-mining Regulations, Potash Regulations, Regulations for disposal of Bituminous Sand Deposits, Regulations for Leasing of Lands containing Limestone, Granite, Slate, Marble, Gypsum, Marl, Gravel, Sand, Clay, Volcanic Ash or any Building Stone, Forest Reserve Regulations, Fishing Regulations, Schedule of Fees.

Municipal Affairs.—Annual Report of Department; List of Alberta Municipalities; Report of the Alberta Assessment Commission Triennial Assessment, 1931–33.

Public Health.—Annual Report of Department; Annual Report on Vital Statistics. Bulletins issued monthly on various health subjects. Pamphlets regarding infectious diseases—Diphtheria, Scarlet Fever, Measles, Whooping Cough, Smallpox, etc. (in different languages). Public Health Bulletin for Teachers; Alberta Mother's Book; Mouth Health; "What you should know about Cancer" (book); General Information regarding Tonsils; Health Rules for School Children; Hints on Home Nursing; Goitre; Systems of State Medicine (book).

Public Works.—Annual Report.

Publicity.—Official Highway Map of Alberta; Statistics of Progress, 1906-28; Alberta tourist literature.

Treasury.—Budget Speech containing extracts from Public Accounts and other financial statements; Public Accounts.

Other Publications.—Annual Reports are also issued by the following Departments and Branches: Railways and Telephones, Treasury (Insurance Branch), Board of Public Utilities, Labour Bureau, Lands and Mines.

BRITISH COLUMBIA.

Agriculture.—*Dairying.*—(5) Varying Butter-fat Tests; (71) Butter-making on the Farm; (2) Farm Cheese; (12) Rules Governing Cow-testing Associations in B.C.; (4) Clotted Cream; (17) The Story of Feed Unit; (20) First List of Dairy Sires; (6) Care of Milk and Cream; (22) Certified Milk and Butter-fat Records, 1932; (1) Ropy Milk in B.C.; (13) A Farm Dairy Sterilizer; (9) Dairy Farm Sterilizing Equipment. *Diseases and Pests.*—(45) Anthracnose; (39) Apple Aphides; (4) Apple-scab; (34) Woolly Aphid of the Apple; (38) The Lesser Appleworm; (32) Cabbage-root Maggot; (37) The Imported Cabbage-worm; (2) Colorado Potato-beetle in B.C.; (35) Currant Gall-mite; (68) Diseases and Pests of Cultivated Plants; (66) Fire-blight; (63) Locust-control; (61) Making Lime-sulphur at Home; (36) The Onion-thrips; (41) The Oyster-shell Scale; (31) Peach-twig Borer; Field Crop and Garden Spray Calendar; Fruit Spray Calendar; (40) Soap Solutions for Spraying; (68) Oil Sprays; (71) Dust Sprays; (33) Strawberry-root Weevil. *Field Crops.*—(6) The Jerusalem Artichoke; (10) Cereal Smuts; (9) Production and Preparation of Grain ; (8) Field Corn; (3) Kale and Rape Crops; (86) The Potato in B.C.; (7) Root-seed Production; (98) Roots and Root-growing; (104) Weeds and their Control; (4) Noxious Weeds. *Fruits and Vegetable Growing.*—(57) Blackberry Culture; (69) Cantaloupe-growing in B.C. Dry Belt; (70) Celery Culture; (56) Currant and Gooseberry Culture; (43) Gardening on a City Lot; (54) Loganberry Culture; (51) Orchard Cover Crops; (53) Selection of Orchard Sites and Soils; (62) Planting Plans and Distances; (60) Pruning Fruit-trees; (55) Raspberry Culture; (67) Rhubarb Culture; (58) Strawberry Culture; (65) Tomato-growing in B.C.; (42) Top-working of Fruit-trees and Propagation; (64) Varieties of Fruit recommended for Planting in B.C. *Live Stock.*—(67) Care and Feeding of Dairy Cattle; (64) Goat-raising in B.C.; (60) Swine-raising in B.C.; (99) Care and Management of Sheep. *Poultry.*—(27) Breeding-stock Hints; (32) Fattening Young Ducks; (15) Profitable Ducks; (25) Hints on Egg Hatching; (93) Feeding for Egg Production; (12) Management of Geese; (31) The Goose; (33) Management and Rearing of Guinea-fowls; (39) Natural and Artificial Incubation and Brooding; Poultry-breeders' Directory; (63) Poultry-house Construction; (11) Poultry-keeping on a City Lot; (49) Market Poultry; (26) Practical Poultry-raising; (19) Poultry Rations for Chicks and Layers; (29) Rabbit Culture; (80) Fur-bearing and Market Rabbits; (28) Rabbit Recipes; (30) Sod-house Construction; (4) Management of Turkeys. *Settlers' Information.*—(43) Agriculture in the Similkameen, Boundary, and Kettle River Districts; (34) Agriculture in West Kootenay; (51) Central B.C.; (42) The Columbia Kootenay Valley; (44) Some Facts about B.C.; (40) The Okanagan Valley; (33) Vancouver Island and Gulf Islands. *Economic Survey Bulletins.*—(101) An Economic Study of Small-fruit Farming in B.C.; (39) Small-fruit Survey, 1921; (49) Tree-fruits Survey, 1921-25. *Miscellaneous.*—(92) Bee Culture in B.C.; (52) Better Farming Suggestions; (50) Exhibition Standards of Perfection; (48) Recommendations and Suggestions to Fall Fair Associations: Farm Account Book; The Farmers' Institutes of B.C.; Farmers' Institute By-Laws; Farmers' Institute Rules and Regulations; Board of Horticulture Rules and Regulations; (47) Use of Water in Irrigation; (45) Judging Domestic Science and Women's Work, with Hints to Exhibitors; List of Publications; (35) How to Pack Nursery Stock; (83) Preservation of Food; (66) Silos and Silage; Women's Institute By-laws; Women's Institute Rules and Regulations. *Reports.*—Agricultural Statistics, 1932; Climate of B.C., 1932; Department of Agriculture Reports.

Lands.—*Forest Branch.*—Circulars: "How to Obtain a Timber Sale" and "Forests and Forestry in British Columbia"; Grazing Regulations.

Mines.—Comprehensive annual reports, special bulletins, preliminary reports, etc. obtainable on application to the Department of Mines.

Bureau of Provincial Information.— The Manual of British Columbia; Come to British Columbia; British Columbia invites you to the Land of the Golden Twilight; Alluring British Columbia; Picturesque Highways of British Columbia; Rod and Rifle in British Columbia; British Columbia, Canada; Synopsis of Hunting and Fishing Regulations, 1933-34. *Lands Series of Bulletins.*—(1) How to Pre-empt; (2) Some Questions and Answers regarding British Columbia; (3) British Columbia—Northern and Central Interior; (5) British Columbia—Southern Interior; (6) British Columbia Coast, Lower Mainland; (7) British Columbia Coast, Toba Inlet to Queen Charlotte Strait; (8) British Columbia Coast, Queen Charlotte Strait to Milbanke Sound; (9) British Columbia Coast, Milbanke Sound to Portland Canal; (10) Crown Lands, Purchase and Lease; (11) Cariboo Land Recording Division; (12) Kamloops Land Recording Division; (13) Similkameen Land Recording Division; (14) Vancouver Island; (15) Queen Charlotte Islands; (16) Cranbrook and Fernie Land Recording Divisions; (17) Yale Land Recording Division; (18) Osyoos Land Recording Division; (19) Nicola Land Recording Division; (20) Nelson and Slocan Land Recording Division; (21) Revelstoke and Golden Land Recording Division; (22) Skeena Land Recording Division; (23) Stikine and Atlin Land Recording Division; (24) Hazelton Land Recording Division; (25) Peace River District; (26) Omineca District, Nation Lakes, etc.; (27) New Westminster Land Recording Division; (28) François-Ootsa Lakes; (29) Endako and Nechako Rivers; (30) Stuart and Babine Lakes; (31) Vicinity of the Pacific Great Eastern Railway (Squamish to Clinton); (32) Vicinity of the Pacific Great Eastern Railway (Clinton to 52nd Parallel); (33) Central Lillooet Division; (34) The Chilcotin Plateau; (35) Fort George Land Recording Division, Central and Western Portions; (36) South Fork of the Fraser and Canoe River Valleys; Mount Garibaldi Park; Mount Robson Park; Strathcona Park, Vancouver Island.

CHAPTER XXX.—THE ANNUAL REGISTER, 1932.

Section 1.—Dominion Legislation, 1932.

Finance and Taxation.—Four Appropriation Acts were passed during the session, *viz.*, cc. 1, 2, 3 and 57, c. 1 applying to the fiscal year ended Mar. 31, 1932, cc. 2 and 3 to the fiscal year ended Mar. 31, 1933, and c. 57 to both years. C. 1 granted $1,059,474.33 towards defraying the general charges and expenses of the Public Service as per the Schedule accompanying the legislation. C. 2 granted the further sum of $33,018,718.84, being one-sixth of the amount of each of the several items to be voted in the Estimates, and a further $2,236,407.85, being one-fourth of the several items set forth in the Schedule to the Act. By c. 3, a further one-twelfth of each of the several items to be voted in the Estimates, *viz.*, $16,554,359.42, was granted and an additional sum of $1,688,000, which was one-sixth of the amount of the several items set forth in the Schedule to that Act.

The Appropriation Act No. 4, 1932, c. 57, provided for $146,707,826.92 to cover one-half of votes Nos. 35, 36, 45, 186, 207, 209-11, and 286 and the remaining three-fourths of the amount of each of the other items less deductions, as voted on in the Estimates and set forth in Schedule A appended to the Act. Further grants were made under this chapter of: $2,242,474.83 as detailed in Schedule B; $8,440,000, being five-sixths of the amount of each of the several items set forth in Schedule C; and $6,620,472.95 as per Schedule D. Under this same chapter, the Governor General in Council was empowered to raise a loan of $200,000,000 for public works and general purposes under the provisions of the Consolidated Revenue and Audit Act of 1931.

By c. 18 of the Statutes of 1932, debts due the Crown by any municipality, corporation, or public or private person or company may be retained by the Minister of Finance by way of deduction or set off out of any sums due or payable in the right of Canada to any such persons or bodies.

A payment from the Bank Circulation Redemption Fund of the amount at the credit of the Eastern Bank of Canada was authorized under c. 29.

Under the Gold Export Act (c. 33), the export of gold whether as coin or bullion may be prohibited by Regulations to be published in the *Canada Gazette*, except under licences to be issued by the Minister of Finance. The penalty for infringement of such Regulations is a sum not exceeding $1,000, or imprisonment not exceeding two years or both fine and imprisonment.

The Income War Tax Act was amended by cc. 43 and 44. By c. 43 the general clause in former legislation providing for the 20 p.c. reduction was struck out and the rate of tax applicable to corporations and joint stock companies was increased; an additional rate of tax was made applicable to all persons including corporations and joint stock companies in receipt of income in excess of $5,000; the exemption was reduced in the case of married and other persons with dependants; income derived from Dominion Government annuities, contracted for after the coming into force of the Amendment, was made exempt from income tax to the extent of $1,200 only; Section 22 of the Income War Tax Act, as amended in 1930, permitting the organization of family corporations, was repealed; other amendments included the assessment of omitted income at double the amount and the revision of the provisions for the making of returns by corporations. By c. 44 a special income tax of 10 p.c. was imposed on the salaries of the judiciary and commissioned officers of military, naval and air forces and of the R.C.M.P. for the fiscal year ended 1933.

Part III of the Special War Revenue Act, dealing with insurance premiums other than life and marine, is amended by c. 54 of the Statutes of 1932, as regards the tax imposed on net premiums received by certain insurance companies, the definition of premiums so regarded and the returns to be made by the insurance companies. Part IV, regarding a tax on cable, telegraph and telephone messages, and Part V, legislating for a tax on pullman seats, berths and other sleeping accommodation, are inserted in the Act after Part III.

Agriculture.—By c. 19, the Destructive Insect and Pest Act was amended to permit the Governor in Council to make Regulations to prevent the introduction or admission into Canada, or the spreading therein or shipment beyond her borders, of any insect, pest or disease destructive to vegetation. Health certificates may be granted, after inspection, for vegetable or other matter before export to any foreign country or for domestic use.

An Act respecting the incorporation of live-stock record associations—the Live-Stock Pedigree Act—is the subject of c. 49. This Chapter sets out the conditions to which applicants for the incorporation of such associations must conform, the corporate organization of these bodies, the certification of pure-bred live stock, the keeping of proper records and the penalties for false statements, etc.

Civil Service.—The Civil Service Act was amended by cc. 40 and 52. The amendments of c. 40 cover: rates of compensation on promotion, the deputy ministers' power to grant increases, the period of residence required of candidates at examinations, vacation leave, the payment of a gratuity in lieu of retiring leave, etc. A new section is added removing from the provisions of the Act postmasters of offices of which the annual revenue does not exceed $3,000. The retirement from office of the then Civil Service Commissioners was provided for, and the subsection dealing with tenure of office of Commissioners was revised. By c. 52—the Salary Deduction Act—provision was made for the deduction of 10 p.c. from the compensation received by members of the public service of Canada for the fiscal year ending Mar. 31, 1933; the basis of superannuation benefits, however, was not to be changed.

Fisheries.—The Fish Inspection Act was amended by c. 31 as regards the kinds of domestic fish to which it applies, and the inspection of containers used for packing and marketing such fish and fish imported into Canada.

An amendment and consolidation of the Fisheries Act was carried out under c. 42. The new Act, known as the Fisheries Act, 1932, co-ordinates former legislation dealing with: fishery leases and licences; the regulation of whale fishing, seal fishing, salmon fishing, lobster fisheries, the possession of fish, construction of fishways, powers of fishery officers, protection of fishermen, penalties, etc.

Insurance, Loan and Trust Companies.—C. 45 is an Act respecting the Department of Insurance necessitated by the decisions of the Privy Council *re* the respective jurisdiction of the Dominion and the provinces in the matter of insurance. This Department is thereby officially re-constituted under the Minister of Finance and its duties defined. The deputy head is to be known as the Superintendent of Insurance and is appointed by the Governor in Council. Neither the Superintendent nor any officer of the Department is to be interested, directly or indirectly, in any insurance company coming under the jurisdiction of the Department. (See also p. 925).

Legislation governing Canadian, British and foreign insurance companies doing business in more than one province in Canada, defining the status and powers of such companies, and providing for a system of returns and inspection to safeguard policy-holders, is the subject of cc. 46 and 47—the Canadian and British Insurance Companies Act, 1932, and the Foreign Insurance Companies Act, 1932, respectively.

Interior.—C. 5, an Act respecting the boundary of Alberta and British Columbia, defines the boundary exactly as laid down by a survey made jointly by the Dominion and the two provinces concerned between 1915 and 1924.

The Yukon Quartz Mining Act is amended by c. 23 as regards the granting of relief in the way of a moratorium on the annual representation of work done which must be shown in accordance with the original Act, due to the low price of metals. The Mining Recorder is empowered to refuse right to obtain entry, or a certificate of work, for misrepresentation or the removing of posts or marks placed under the provisions of the Act.

Under c. 35 the Governor in Council upon recommendation of the Minister of the Interior is authorized to make refunds of monies representing dues, fees, guarantee deposits, credit balances, trust funds, etc., received in connection with the administration of the natural resources of the western provinces prior to the transfer thereof to the respective Provincial Governments.

By c. 55, Waterton Lakes National Park is made a part of the Waterton Glacier International Peace Park.

Justice.—The Admiralty Act was amended by c. 4 of the Statutes as regards the scope of the Rules which the President of the Exchequer Court of Canada may make, and the extent and effect thereof. Cc. 7, 8, 9 and 28 are Amendments of the Criminal Code. C. 7 relates to the passing of cheques without sufficient funds on deposit and the procedure to be followed in certain provinces; c. 8 prohibits the conveyance of prohibited articles for use in connection with lotteries; c. 9 is an Amendment in connection with the procedure governing summary trials in certain cases; and c. 28 re-defines the term "trustee".

The Marriage and Divorce Act was amended by c. 10, which permits marriage with a deceased's wife's sister or a daughter of a sister or brother of a deceased wife, or a deceased husband's brother or a son of a brother or sister of a deceased husband.

Cc. 16 and 48 are Amendments to the Judges Act, the first in its relation to travelling allowances and the second as regards the removal of judges of Circuit Court, district of Montreal.

C. 17 amended the Juvenile Delinquents Act and rules that, in the prosecution of cases of parents or adults aiding delinquency, it shall be no defence if the child does not become delinquent.

Labour.—The provisions of the Unemployment and Farm Relief Act of 1931 were extended until May 1, 1932, under c. 13, known as the Unemployment and Farm Relief Continuance Act, 1932.

Legislation respecting relief measures in the form of the Relief Act, 1932, is the subject of c. 36. This Act authorizes Agreements with provinces respecting relief, outlines the forms which such relief may take, and permits the Governor in Council to take all measures necessary, in his discretion, to protect the credit of the Dominion or any province. The power to make Orders and Regulations to facilitate the carrying out of the intention of the Act is also granted.

National Revenue.—The Excise Act was amended in several minor respects by c. 30. These included: the definition of 'Provincial Analyst', the power to refuse or suspend licences under the Excise Act, the recovery of penalties or forfeitures incurred under the Act, procedure in regard to penalties, conditions governing spirits entered for consumption, excise duties on screened malt, etc.

The Customs Tariff was amended by c. 41 with respect to repair parts, wool and hides listed as items 409, 549 and 599 of Schedule A.

Radio.—C. 51 of the Statutes is the Canadian Radio Broadcasting Act, 1932. It authorized the appointment of the Canadian Radio Broadcasting Commission and outlined its organization and powers, including the making of Agreements regarding broadcasting and the acquisition of property or the expropriation and compensation proceedings which may be taken. The expenditures of the Commission must not exceed the estimated revenue from receiving licences and must be appropriated by Parliament and audited by the Auditor-General in the same manner as other public moneys. (See also pp. 731-733.)

Trade and Commerce.—The use of the terms 'Board of Trade' and 'Chamber of Commerce' and the organization of other boards where there are existing boards are restricted under c. 14—an Act to amend the Boards of Trade Act. Any Board of Trade, duly registered, may become affiliated with the Canadian Chamber of Commerce on complying with certain requirements.

The Patent Act is amended by c. 21 of the Statutes in regard to conflicting applications for and infringements of patents, and the records and statements of applicants.

C. 22 amended the Petroleum and Naphtha Inspection Act as regards the tests applied to petroleum.

The Companies Act Amendment Act, 1932, is the subject of c. 27 of the Statutes. This Amendment deals with the registration of mortgages and charges, the maintenance of registration and transfer offices, and records.

The Trade Agreement between Canada and New Zealand assented to on May 13, 1932, is dealt with in c. 34. The Schedule accompanying the Act defines the scope of the Agreement in ten Articles. The new detailed tariff schedule agreed upon is appended to the Schedule.

The Unfair Competition Act, c. 38 of the Statutes, safeguarded the proper use of trade marks duly registered in Canada and limited the general form of design which may be adopted for trade-mark purposes and the registration thereof.

C. 39 amended the Bankruptcy Act in several respects including: proof of debt etc., appointment and powers of the interim receiver, the procedure in the case of bankrupt farmers whose liabilities exceed $500, the proper registration of assignments, conditions governing the appointment of the trustee and custodian, the licensing and powers of a trustee, the ranking of claims, court procedure, and the records to be promptly forwarded to the Superintendent of Bankruptcy and the Dominion Statistician.

The Winding-up Act as it applies to Insurance Companies (Part III) was amended by c. 56, which re-defines the term 'assets' as it applies to such companies and describes when a company shall be deemed insolvent. Other important matters dealt with are: the order of priority for the payment of claims, the re-insurance of contracts by the liquidator without the consent of the policy-holders, and the duties of the liquidator as regards the making of reports and returns.

Transportation and Communications.—Cc. 6 and 25 of the Statutes of 1932 are Acts to authorize the additional provision of moneys to meet expenditures and indebtedness incurred on behalf of the Canadian National Railways during 1931 and 1932 respectively. The Acts grant the power to borrow for this purpose and outline the method of financing by securities which are to be issued by approval of the Governor in Council. The principle of competitive bids for the sale of such securities is laid down. Cc. 15 and 26 are Acts to authorize the guarantee by the Canadian Government of the securities to be issued under cc. 6 and 25 respectively. An extension of time for the completion of the construction of certain lines of railway by the Canadian National Railways is granted by c. 24.

Under c. 50—an Act to amend the Montreal Harbour Commissioners' Act, 1894—the original legislation is amended so that all harbour property, movable and immovable, "heretofore acquired or held" is vested in the Crown and shall be deemed to have been so vested since July 1, 1867.

Miscellaneous.—The Minister of Public Works was authorized, under c. 11, to extend for one year the provisions of the then existing Agreement with the Corporation of the City of Ottawa, for certain civic services in return for a fixed annual payment, in addition to payment for water. The Government is to undertake the upkeep of works in the vicinity of Parliament Hill.

By c. 12, Orders in Council or Regulations made by the Governor in Council under authority of the Forest Reserves and Parks Act or the Dominion Lands Act were declared to have the same force and effect as if approved by Parliament as required by those Acts.

The Opium and Narcotic Drug Act was amended by c. 20, which contains a new Schedule mentioning the substances recognized as "drugs" under the Act and re-defines "opium". An amendment is also made regarding the forfeiture of seized drugs.

The Royal Canadian Mounted Police Act is amended regarding the appointment of officers and the delegation of authority by c. 37. A new subsection is added extending the powers possessed by members of the Force in connection with the prevention of offences against the revenue laws of Canada. Amendments are also made regarding pensions and allowances to the personnel of the Force.

C. 53 amends the Soldier Settlement Act, permitting the transfer of lands which have not been sold by the Board to the municipality in which such land is situated, or the sale of lands in certain specified cases at prices not less than the estimated costs to a settler.

Section 2.—Provincial Legislation.

A list of the public Acts of the Provincial Legislatures usually appears under this section of the Year Book. In order to conserve space, it was decided last year to refer the reader to the different provincial authorities for information in this connection. The same procedure is followed this year. It is felt that whatever is lost to those readers who are interested in having all provincial legislation brought together and listed under one head, is more than offset by the information of more general interest which it has been possible to include in the limited space available, but which would otherwise have had to be omitted.

Section 3.—The Imperial Economic Conference, 1932.[1]

The year 1932 witnessed a notable event in the history of the Dominion—the holding of the Imperial Economic Conference in Ottawa from July 21 to Aug. 20. Thirty-eight years previously Ottawa had acted as host to an assembly of delegates from the British Empire. That, however, was a Colonial, not an Imperial Conference, and was both restricted in its powers and incomplete in its representation. The 1932 meeting in Ottawa may, in fact, be considered as the first Imperial Conference which has met outside the United Kingdom. It is, therefore, an important landmark in Imperial development.

The origin of the Conference may be found in the previous Imperial Conference of 1930. That Conference unanimously adopted the following Resolution:—

> "I. The Imperial Conference records its belief that the further development of intra-Imperial markets is of the utmost importance to the various parts of the Commonwealth.
>
> "II. Inasmuch as this Conference has not been able, within the time limit of its deliberations, to examine fully the various means by which intra-Imperial trade may best be maintained and extended, it is resolved that the Economic Section of the Conference be adjourned to meet at Ottawa on a date within the next twelve months to be mutually agreed upon, when that examination will be resumed with a view to adopting the means and methods most likely to achieve the common aim; provided that this reference is not to be construed as modifying the policy expressed on behalf of any of the Governments represented at this Conference.
>
> "III. The agenda for the meeting referred to in the previous resolution will be agreed between the several Governments".

At the concluding meeting of the 1930 Conference the Prime Minister of Canada, in accordance with the above Resolution, moved that the Economic Section of the Conference adjourn to Ottawa, to meet within the next twelve months at a date to be mutually agreed upon. This motion was carried unanimously.

To implement the above Resolution the Canadian Government entered into negotiations with the other Governments of the Empire. It was not possible to hold the proposed meeting within the twelve months specified in the Resolution, but toward the middle of January, 1932, the Canadian Government formally invited the Governments of the United Kingdom, the Irish Free State, the Union of South Africa, Australia, New Zealand, India, Newfoundland and Southern Rhodesia to attend an Imperial Economic Conference at Ottawa in July, 1932. It was understood that this Conference would, in its organization and procedure, follow the well-established lines laid down at previous Imperial gatherings. The agenda, as finally agreed upon, was as follows:—

A. General Trade Questions.—

1. Examination of aspects of general trade and tariff policy and administration affecting Empire trade, including, *inter alia*, the following subjects:—
   - (a) Recognition of the principle of reciprocal tariff preferences within the Commonwealth;
   - (b) General application of existing and future tariff preferences within the Commonwealth;
   - (c) Extension to other parts of the Commonwealth of tariff advantages accorded foreign countries;
   - (d) Determination of percentage of "Empire Content" necessary to secure preferential tariff treatment;
   - (e) Export bounties and anti-dumping duties within the Commonwealth.

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[1] Prepared in the Department of External Affairs, Ottawa.

2. Commercial Treaty policy with respect to foreign countries, including, *inter alia*:—
   - (a) Relation of intra-Imperial preferences to concessions to foreign countries;
   - (b) Interpretation of most-favoured-nation clause, particularly with reference to the development of regional preferences and of systems of import quotas.
3. Consideration of the appropriate basis and means of effecting intra-Imperial economic co-operation, including review of existing agencies, examination of the report of the Imperial Economic Committee on Industrial Co-operation, and discussion of communications and of research and standardization.

B. Monetary and Financial Questions—

Consideration of existing inter-relationships of the various currencies and monetary standards of the Empire, and of the desirability and feasibility of taking steps to restore and stabilize the general price level and to stabilize exchange.

C. Negotiation of Trade Agreements.

PREPARATORY WORK.

The Canadian Government was responsible, not only for the preparation of economic data for the use of the Canadian delegation to the Conference, but also for the compilation, in convenient form, of general economic information which would be helpful to the visiting delegations. It was responsible, also, for the organization of a Conference Secretariat and the provision of accommodation and facilities for the business sessions of the Conference.

By direction of the Prime Minister, and under supervision of a Cabinet Committee, a General Preparatory Committee was set up to supervise the detailed work of preparation and to co-ordinate the activities of the various Departments of Government in connection with the Conference. Subordinate inter-departmental committees were constituted as follows:—

A Tariff Preparatory Committee, responsible for the preparation of complete tariff data, including studies of Canadian products on which tariff concessions in the other parts of the Commonwealth would be most beneficial, and of the tariff concessions which could be most easily granted in return; the examination of tariff classifications or other governmental laws or regulations tending to restrict the expansion of Canadian trade with other parts of the Commonwealth, and other tariff problems likely to be discussed at the Conference.

A General Economic Committee to undertake the preparation of exhaustive data on general economic subjects, including statistical studies of the trade of the Commonwealth, the tariff preferences already in force, the effects of such preferences on the development of trade, Empire content, import quotas, import boards or central buying or selling organizations, cartels, embargoes, steamship services, merchandise marks, preference in government contracts, industrial co-operation and specialization within the Commonwealth, and similar economic matters of intra-Imperial interest.

A Monetary Committee to prepare financial and monetary material, including: information on the discussions of monetary problems at previous Imperial Conferences, the evils of monetary instability, export credits, the international gold standard, the re-monetization of silver, the balance of indebtedness, the movement of prices, and other monetary and financial questions likely to be of interest to the Conference.

An Administrative and Staff Committee, whose duty it was to arrange for office accommodation and supplies for delegates and their advisers, suitable meeting places for the various committees and for plenary sessions of the Conference; to organize clerical, filing, stenographic, and messenger services; to arrange for facilities for the press; and in general to make arrangements to facilitate the smooth functioning of the business sessions of the Conference.

A Government Hospitality Committee, responsible for the arrangements for the reception and accommodation of the visiting delegations and for official entertainments during the Conference. The work of this committee continued during the Conference, and there is every reason to believe that its work lived up to the fine traditions for hospitality established in London at previous Conferences.

The above committees were organized early in the spring of 1932, and in the following months a very great deal of intensive study and research was undertaken. It was evident that, in view of the special economic conditions both intra-Imperial and international under which the Conference would meet, it would require a completely new documentation on a much wider basis than for the Conference of 1930. As the preliminary and final reports of the various committees were turned in, they were studied by a Committee of the Cabinet, under the Chairmanship of the Prime Minister, and the broad lines of Canadian policy at the Conference laid down.

REPRESENTATION AT THE CONFERENCE.

The Conference opened on July 21, with the Governments represented by the following delegates:—

CANADA.

THE RT. HON. R. B. BENNETT, K.C., M.P., Prime Minister and Secretary of State for External Affairs.
THE RT. HON. SIR GEORGE H. PERLEY, K.C.M.G., M.P., Minister without Portfolio.
THE RT. HON. ARTHUR MEIGHEN, K.C., Minister without Portfolio.
THE HON. HUGH GUTHRIE, K.C., M.P., Minister of Justice.
THE HON. EDGAR N. RHODES, K.C., M.P., Minister of Finance.
THE HON. H. H. STEVENS, M.P., Minister of Trade and Commerce.
THE HON. DR. R. J. MANION, M.C., M.P., Minister of Railways and Canals.
THE HON. E. B. RYCKMAN, K.C., M.P., Minister of National Revenue.
THE HON. ARTHUR SAUVÉ, M.P., Postmaster-General.
THE HON. C. H. CAHAN, K.C., M.P., Secretary of State of Canada.
THE HON. ALFRED DURANLEAU, K.C., M.P., Minister of Marine and Acting Minister of Fisheries.
THE HON. MAURICE DUPRÉ, K.C., M.P., Solicitor General.
THE HON. W. A. GORDON, K.C., M.P., Minister of Labour, Minister of Mines and Acting Minister of Immigration and Colonization.
THE HON. ROBERT WEIR, M.P., Minister of Agriculture.

UNITED KINGDOM.

THE RT. HON. STANLEY BALDWIN, M.P., Lord President of the Council.
THE RT. HON. NEVILLE CHAMBERLAIN, M.P., Chancellor of the Exchequer.
THE RT. HON. J. H. THOMAS, M.P., Secretary of State for Dominion Affairs.
THE RT. HON. THE VISCOUNT HAILSHAM, Secretary of State for War.
THE RT. HON. SIR PHILIP CUNLIFFE-LISTER, G.B.E., M.C., M.P., Secretary of State for the Colonies.
THE RT. HON. WALTER RUNCIMAN, M.P., President of the Board of Trade.
THE RT. HON. SIR JOHN GILMOUR, Bt., D.S.O., M.P., Minister of Agriculture and Fisheries.

COMMONWEALTH OF AUSTRALIA.

THE RT. HON. S. M. BRUCE, C. H., M.C., M.P., Minister without Portfolio.
THE HON. H. S. GULLETT, M.P., Minister of State for Trade and Customs.

NEW ZEALAND.

THE RT. HON. J. G. COATES, M.C., M.P., Minister of Public Works, Transport and Employment.
THE HON. W. DOWNIE STEWART, M.P., Minister of Finance and Customs, etc.

UNION OF SOUTH AFRICA.

THE HON. N. C. HAVENGA, M.P., Minister of Finance.
THE HON. P. G. W. GROBLER, M.P., Minister of Lands.
THE HON. A. P. J. FOURIE, M.P., Minister of Mines and Industries.

IRISH FREE STATE.

MR. SEAN T. O'KELLY, T.D., Vice-President of the Executive Council, Minister of Local Government and Public Health.
MR. SEAN LEMASS, T. D., Minister for Industry and Commerce.
DR. JAMES RYAN, T.D., Minister for Agriculture.

NEWFOUNDLAND.

THE HON. F. C. ALDERDICE, Prime Minister.
THE HON. L. E. EMERSON, K.C., Minister of Justice.

INDIA.

SIR ATUL C. CHATTERJEE, K.C.S.I., K.C.I.E., Member of the Council of India.
SIR HENRY STRAKOSCH, G.B.E., Member of the Council of India.
SIR GEORGE SCHUSTER, K.C.S.I., K.C.M.G., C.B.E., M.C., Member of Council of Governor-General of India.
SIR GEORGE RAINY, K.C.S.I., K.C.I.E., I.C.S., Late Member of Council of Governor-General of India.
SIR PADAMJI PESTONJI GINWALA, Kt.
MR. R. K. SHANMUKHAM CHETTY, M.L.A., Deputy President, Indian Legislative Assembly.
SAHIBZADA ABDUS SAMED KHAN, C.I.E., Prime Minister, Rampur State.
SETH HAJI ABDOOLA HAROON, M.L.A.

SOUTHERN RHODESIA.

(As Observers.)

THE HON. H. U. MOFFAT, C.M.G., M.L.A., Premier.
THE HON. P. D. L. FYNN, C.M.G., M.L.A., Treasurer.

There were in addition attached to each delegation advisers, secretaries and other assistants.

The Secretariat General of the Conference was composed of Canadian civil servants, together with one representative of each of the visiting delegations as follows:—

SECRETARY TO THE CONFERENCE.

DR. O. D. SKELTON, Under-Secretary of State for External Affairs.

DEPUTY SECRETARY TO THE CONFERENCE.

MR. J. E. READ, K.C., Legal Adviser, Department of External Affairs.

ADMINISTRATIVE SECRETARY.

LT.-COL. H. J. COGHILL, Sergeant-at-Arms, House of Commons.

SECRETARIES NOMINATED BY DELEGATIONS.

Canada.—MR. J. S. MACDONALD, Second Secretary, Department of External Affairs.

United Kingdom.—MR. R. B. HOWORTH, C.B., C.M.G., Deputy Secretary, Cabinet Office.

Commonwealth of Australia.—MR. J. F. MURPHY, Prime Minister's Department.

New Zealand.—MR. A. D. PARK, C.M.G., Secretary to Treasury.

Union of South Africa.—MR. G. P. JOOSTE, Private Secretary to the Minister of Finance.

Irish Free State.—MR. J. V. FAHY, Secretary of the Department of External Affairs.

Newfoundland.—MR. W. J. CAREW, Secretary to the Prime Minister.

India.—MR. H. A. F. LINDSAY, C.I.E., C.B.E., I.C.S.

Southern Rhodesia.—MR. F. M. C. STOKES, Private Secretary to the Premier.

On the opening of the Conference the Secretariat General took over the purely administrative side of its activities, including arrangements for the organization and meetings of committees and sub-committees, the circulation of Agenda, the drafting of reports of proceedings of the various committees and sub-committees and of the Conference itself and their distribution to the various delegations. The visiting delegations were generous in their acknowledgment of the manner in which these duties were carried out, and of the assistance of the Secretariat in the solution of the problems before the Conference.

OPENING OF THE CONFERENCE.

The Conference was opened by His Excellency the Governor General of Canada who first delivered a gracious message from His Majesty the King, which was in the following terms:—

> "My thoughts and prayers are with the delegates of my Governments who are gathered in Conference to-day, to explore the means by which they may promote the prosperity of the Peoples of this great Empire.
>
> "At this Conference you are opening a new page of history, on which within a few weeks will be written the record of a determined effort to solve the difficulties weighing so heavily, not only on us, but upon the whole world. It is my earnest hope that when this Conference rises there will be a record of results worthily reflecting the frankness, the sincerity, and the spirit of helpfulness with which, I feel confident, your deliberations will be conducted.
>
> "The British Empire is based on the principle of co-operation, and it is now your common purpose to give the fullest possible effect to that principle in the economic sphere. By so doing you will set in motion beneficial forces within the British Commonwealth which may well extend their impulse also to the world at large. I pray that you may be given clear insight and strength of purpose for these ends.
>
> GEORGE R.I."
>
> July 21, 1932.

His Excellency, on behalf of the Government and people of Canada, then welcomed the delegations who had come from Overseas.

On the motion of the Leader of the Delegation of the United Kingdom, seconded by the Leader of the Delegation of Australia, the Prime Minister of Canada was asked to take the Chair at the meetings of the Conference and of the Heads of Delegations.

As its first official act, the Conference placed on record a resolution of respectful devotion to His Majesty the King, which was moved by the Prime Minister of Canada as Chairman of the Conference and seconded by the Leader of the Delegation of India, and passed unanimously.

ORGANIZATION.

The opening meeting of the Conference was held in the House of Commons Chamber, in the Parliament Buildings. It was found convenient, however, to conduct the work of the Conference at meetings of the Heads of Delegations and other Delegates, held in the Railway Committee Room and in Room 216 in the Centre Block, Parliament Buildings. These meetings were attended by the Heads of the Delegations, together with other Delegates.

It was decided to divide the matters which were under consideration by the Conference into five principal divisions, and to refer the matters comprised in each division to a committee for examination and report. These divisions included matters relating to the promotion of trade within the Commonwealth, matters relating to customs administration, matters relating to commercial relations with foreign countries, matters relating to monetary and financial questions and matters relating to methods of economic co-operation.

Committees were appointed in all instances by the meetings of Heads of Delegations and sub-committees were constituted by all of the five principal committees.

The total number of meetings was: Plenary Conference, 5; Heads of Delegations, 5; Committees and Sub-Committees, 49.

In addition to the committees and sub-committees of the Conference six groups were constituted made up of representatives of those Dominions which were interested in: (1) dairy products (including poultry and eggs); (2) meat (including live cattle and pig products); (3) fruit and vegetables; (4) cereals (including flour); (5) metals and minerals; (6) tobacco.

These groups held numerous meetings and their activities were of great assistance in connection with the bi-lateral negotiations between the United Kingdom and certain of the Dominions.

PUBLICITY.

The arrangements for publicity followed those adopted at previous Conferences. The Honourable R. J. Manion, M.C., M.P., Minister of Railways and Canals, Canada, was charged with responsibility for the general supervision of the publicity arrangements and acted as Minister in charge of Press Relations. He was assisted by the following press officers: L. B. Pearson, First Secretary, Department of External Affairs; A. W. Merriam, Private Secretary to the Prime Minister of Canada; A. Lalonde, Solicitor, Post Office Department of Canada. As evidence of the widespread interest which the Conference evoked it may be stated that 253 press representatives from Great Britain, the Dominions, the United States, France, Germany, Italy and Denmark, were given credentials.

CONCLUSIONS AND RESULTS.

The results of the Conference are to be found in (1) certain Intra-Imperial Trade Agreements, and (2) in the reports of the five committees previously referred to, which were submitted to and accepted by the Conference.

INTRA-IMPERIAL TRADE AGREEMENTS.

The following Trade Agreements were signed at the closing session of the Conference:—

I. United Kingdom-Australia.
II. United Kingdom-Union of South Africa.
III. United Kingdom-New Zealand.
IV. United Kingdom-India.
V. United Kingdom-Newfoundland.
VI. United Kingdom-Southern Rhodesia.
VII. United Kingdom-Canada.
VIII. Canada-Irish Free State.
IX. Canada-Union of South Africa.
X. Canada-Southern Rhodesia.
XI. Union of South Africa-Irish Free State.

The United Kingdom-Canada Agreement.—The most important of these Agreements, from the Canadian point of view, is that between the United Kingdom and Canada. It may be summarized as follows:—

Article 1.—By this the free entry of Canadian products into the United Kingdom under the Import Duties Act of 1932 is continued after Nov. 15, 1932, when it otherwise would have lapsed. This is subject, however, to the following reservation: "As regards eggs, poultry, butter, cheese and other milk products, free entry for Canadian produce will be continued for three years certain. His Majesty's Government in the United Kingdom, however, reserve to themselves the right, after the expiration of the three years, if they consider it necessary in the interest of the United Kingdom producer to do so, to review the basis of preference so far as relates to the articles above enumerated and, after notifying His Majesty's Government in Canada, either to impose a preferential duty on Canadian produce whilst maintaining preferential margins, or in consultation with the Canadian Government to bring such produce within any system which may be put into operation for the quantitative regulation of supplies from all sources in the United Kingdom market".

Article 2.—Provides for the imposition by the United Kingdom of the following duties on foreign goods in place of the duties, if any, previously levied:—

"Wheat in grain	2 /– per quarter.
Butter	15 /–per cwt.
Cheese	15 p.c. *ad valorem.*
Apples, raw (excluding apples consigned direct to a registered cider manufacturer for use in making cider)	4 /6d. per cwt.
Pears, raw	4 /6d. per cwt.
Apples, canned	3 /6d. per cwt. in addition to the duty in respect of sugar content.
Dried fruits, now dutiable at 7 /–	10 /6 d. per cwt.
Eggs in shell:—	
(a) Not exceeding 14 lbs. in weight per great hundred	1 /– per great hundred.
(b) Over 14 lbs., but not exceeding 17 lbs.	1 /6d. "
(c) Over 17 lbs.	1 /9d. "
Condensed milk, whole, sweetened	5 /– per cwt. in addition to duty in respect of sugar content.
Copper, unwrought, whether refined or not, in ingots, bars, blocks, slabs, cakes, and rods	2d. per lb.

Article 3.—The United Kingdom undertakes that the general *ad valorem* duty of 10 p.c. imposed by the Import Duties Act of 1932 on the foreign goods specified below shall not be reduced except with the consent of the Canadian Government:—

"Timber of all kinds imported into the United Kingdom in substantial quantities from Canada, in so far as now dutiable.

"Fish, fresh, sea.
Salmon, canned.
Other fish, canned.
Asbestos.
Zinc.
Lead."

Article 4.—"It is agreed that the duty on either wheat in grain, copper, zinc or lead as provided in this Agreement may be removed if at any time Empire producers of wheat in grain, copper, zinc and lead respectively are unable or unwilling to offer these commodities on first sale in the United Kingdom at prices not exceeding the world prices and in quantities sufficient to supply the requirements of the United Kingdom consumers."

Article 5.—Provides for the modification of the conditions at present governing the import into the United Kingdom of live cattle from Canada.

Article 6.—Declares that in the proposed quantitative regulation of the supplies of bacon and hams coming on to the United Kingdom market provision will be made for the free entry of Canadian bacon and hams of good quality up to a maximum of 2,500,000 cwt. per annum.

Article 7.—Secures for Canada the existing margin of preference over foreign tobacco over a period of ten years so long as the duty does not fall below 2/0½d. per lb., in which event the margin of preference shall be equal to the full duty.

Article 8.—Provides for the extension to Canada of any preference which may for the time being be accorded to any other part of the British Empire by the non-self-governing Colonies and Protectorates as well as new or additional preferences by the Colonies on a specified list of commodities and at rates shown in that list.

Article 9.—Provides for the alteration of the Canadian Customs duties on a specified list of commodities, with a proviso that nothing in the Article shall preclude the Canadian Government from reducing the duties specified in the said list so long as the margin of British preference is preserved or from increasing the rates under the intermediate or general tariff set out in the said list.

This Article of the Agreement includes the main concessions made to the United Kingdom by the Canadian Government; 225 Canadian tariff items are affected, on 223 of which the margin of British preference is increased. This result is secured in the following ways:—

(a) By reduction of the British preferential rate on 81 items;

(b) By increase in the intermediate or general rate, or both, on 89 items;

(c) By reduction in the British preferential rate accompanied by increases in the other rates, 49 items;

(d) By reduction in all rates, 2 items;

(e) By increase in all rates, 1;

(f) By reduction in the British preferential and intermediate rates, 1.

By major groups, the tariff changes mainly concern iron and steel, drugs and chemicals, textiles, leather goods, glass, vegetable oils, as well as a wide list of miscellaneous commodities.

As regards iron and steel, the changes aim to give a material widening of the preference on primary forms such as steel plates; black, galvanized and tinned sheets; boiler plates; and various kinds of strip and hoop steel. The preference is also widened on steel tires, railway axles, wire products, steel chains, certain machinery, cutlery and small tools. Duties are removed entirely on poundage steel in bars; large bars for shafting; casement sections; rust and heat resisting steels; certain special steels; tramway rails; heavy structural shapes; forgings; automobile engines of heavy rating; telephone and radio apparatus, etc. Automobiles, motor trucks and motorcycles are also given free entry.

The British preference has also been widened in the field of drugs and chemicals, flat glass, and on manufactured leathers such as belting, sole leather, pig and morocco leathers, and all leather further finished than tanned.

So far as textiles are concerned, the changes made on cotton goods cover a wide group of textile products from yarns to clothing, and the specific duties are generally reduced by one-third, though the domestic industry is still substantially protected. Piece cottons are made free of duty, while a wider preference is given mercerized cotton yarns and other cotton products. The specific duties on woollen goods—from yarns to clothing—are reduced by at least one-quarter on every item where such duties were operative. On blankets and carpets the specific duty is c in half, and hair yarns, lusters, linings and light weight grey fabrics and articles not made in Canada and certain jute fabrics are given free entry.

Increased preferences were also granted on anthracite coal, alcoholic liquors, vegetable oils, and other miscellaneous commodities.

Article 10.—The Canadian Government "undertake that protection by tariffs shall be afforded against United Kingdom products only to those industries which are reasonably assured of sound opportunities for success".

Article 11.—"His Majesty's Government in Canada undertake that during the currency of this Agreement the tariff shall be based on the principle that protective duties shall not exceed such a level as will give United Kingdom producers full opportunity of reasonable competition on the basis of the relative cost of economical and efficient production, provided that in the application of such principle special consideration shall be given to the case of industries not fully established."

Articles 12, 13, 14 and 15.—Provide for the establishment of a Tariff Board in Canada and outline some principles by which it will be guided.

Article 16.—"His Majesty's Government in Canada undertake that Customs administration in Canada shall be governed by such general principles as will ensure *(a)* the avoidance, so far as reasonably possible, of uncertainty as to the amount of Customs duties and other fiscal imposts payable on the arrival of goods in Canada; *(b)* the reduction of delay and friction to a minimum; and *(c)* the provision of machinery for the prompt and impartial settlement of disputes in matters appertaining to the application of tariffs."

Article 17.—"His Majesty's Government in Canada undertake that all existing surcharges on imports from the United Kingdom shall be completely abolished as soon as the finances of Canada will allow. They further undertake to give sympathetic consideration to the possibility of reducing and ultimately abolishing the exchange dumping duty in so far as it applies to imports from the United Kingdom."

Article 18.—"His Majesty's Government in Canada undertake to modify the existing Regulations governing the importation of pedigree stock from the United Kingdom into Canada in a manner already agreed upon in principle between themselves and His Majesty's Government in the United Kingdom."

Article 19.—Provides for the extension to the non-self-governing Colonies, Protectorates and Mandated Territories of the preferential rates of Canadian duties shown in a prescribed list and under certain conditions.

Article 20.—Provides that "nothing in the Agreement shall prejudice or diminish any of the benefits enjoyed by any of the parties thereto under the Canada-West Indies Trade Agreement dated the 6th of July, 1925".

Article 21.—"This agreement is made on the express condition that, if either Government is satisfied that any preferences hereby granted in respect of any particular class of commodities are likely to be frustrated in whole or in part by reason of the creation or maintenance directly or indirectly of prices for such class of commodities through State action on the part of any foreign country, that Government hereby declares that it will exercise the powers which it now has or will hereafter take to prohibit the entry from such foreign country directly or indirectly of such commodities into its country for such time as may be necessary to make effective and to maintain the preferences hereby granted by it."

Article 22.—"This Agreement between His Majesty's Government in the United Kingdom and His Majesty's Government in Canada is to be regarded as coming into effect as from the date hereof[1] (subject to the necessary legislative or other action being taken as soon as may be practicable hereafter). It shall remain in force for a period of five years, and if not denounced six months before the end of that period shall continue in force thereafter until a date six months after notice of denunciation has been given by either party."

Article 23.—"In the event of circumstances arising which, in the judgment of His Majesty's Government in the United Kingdom or of His Majesty's Government in Canada, as the case may be, necessitate a variation in the terms of the Agreement, the proposal to vary those terms shall form the subject of consultation between the two Governments."

The Canada-South Africa Trade Agreement.—This Agreement places the commercial relations between these two Dominions on a treaty basis for the first time. It covers the principal commodities which each Dominion can sell to the other, but is naturally somewhat more limited in scope than the trade agreements concluded earlier with Australia and New Zealand. A considerable extension of the preferred list of commodities has been obtained for Canada. Special consideration has been given to corn from South Africa, although fruits in certain seasons, peanuts, sugar and molasses are also given consideration. Wheat, canned goods, motor cars, electrical appliances, rubber goods and paper products are the chief items on which concessions are made to Canada.

Canada-Irish Free State Trade Agreement.—This Agreement secures for all goods the produce and manufacture of Canada imported into the Irish Free State the benefits of the lowest rates of duty accorded to similar products of any country. In return, goods the produce or manufacture of the Irish Free State, when imported into Canada, will be accorded the same tariff treatment as similar goods imported from the United Kingdom.

Canada-Southern Rhodesia Trade Agreement.—Provision is made in this Agreement for the exchange of preferential treatment on selected lists of commodities. In addition, other goods not enumerated in the schedules continue to enjoy the benefits of existing and future British preferences. Indian corn, citrous fruits and peanuts are given free entry by Canada, whereas Southern Rhodesia gives important concessions on farm machinery, boots and shoes, and wood and paper products.

In commending these Trade Agreements to the Governments of the several parts of the Empire, the Conference recorded its conviction that by the lowering or removal of barriers among themselves provided for in these Agreements the flow of trade between the various countries of the Empire would be facilitated, and that by the consequent increase of purchasing power of their peoples the trade of the world would also be stimulated and increased. Further, that the conclusion of these Agreements was a step forward which should in the future lead to further progress in the same direction and which would utilize protective duties to ensure that the resources and industries of the Empire were developed on sound economic lines.

In addition to the four Agreements with the United Kingdom, the Union of South Africa, the Irish Free State, and Southern Rhodesia, conversations took place with the delegations from Newfoundland, India, Australia and New Zealand which served to provide an opportunity for examining the openings for mutual trade and, with regard to Australia and New Zealand, discussions were held on the supplementing of the Trade Agreements of 1931 and 1932 respectively.

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[1] August 20, 1932.

THE REPORTS OF THE COMMITTEES.

The conclusions and recommendations of the Conference based on these reports may be summarized as follows:—

Resolutions Regarding Customs Administration.—The Conference recommended that the aims to be kept in view should be:—

(i) The avoidance of uncertainty as to the amount of duty which would be payable on the arrival of goods in the importing country;

(ii) The reduction of friction and delay to a minimum;

(iii) The provision of facilities for the expeditious and effective settlement of disputes relating to all matters affecting the application of the Customs Tariff;

and that any measures which Customs Administrations might take to safeguard themselves against evasion should be consistent with these principles.

Statement Regarding Commercial Relations with Foreign Countries.—The Conference considered two broad groups of questions affecting the commercial relations of the several members of the Commonwealth with foreign countries.

In the first place, the Conference discussed the general question of the relationship between intra-Commonwealth preferences and the most-favoured-nation clause in commercial treaties with foreign powers. Each Government will determine its particular policy in dealing with this matter, but the representatives of the various Governments on the Committee stated that it was their policy that no treaty obligations into which they might enter in the future should be allowed to interfere with any mutual preferences which Governments of the Commonwealth might decide to accord to each other, and that they would free themselves from existing treaties, if any, which might so interfere. They would, in fact, take all the steps necessary to implement and safeguard whatever preferences might be so granted.

In the second place, attention was drawn to recent tendencies in foreign countries to conclude regional agreements between themselves for the mutual according of preferences which were designed as being exclusive, and not to be extended to countries which were not parties to, or did not adhere to the agreements. On this point, there was a general agreement that foreign countries which had existing treaty obligations to grant most-favoured-nation treatment to the products of particular parts of the Commonwealth could not be allowed to override such obligations by regional agreements of the character in question.

The Conference recognized that the fact that rights are accorded by most-favoured-nation treatment did not preclude a foreign country from seeking the consent of the various Governments of the British Commonwealth to the waiver of their rights in particular cases, and that these Governments must be guided by consideration of their individual interests in deciding whether or not to meet the wishes of the foreign country concerned, so long, however, as the general principle that rights of this kind cannot be arbitrarily withdrawn was fully and carefully preserved.

The Conference, in addition, recommended that where two or more Commonwealth Governments shared a common interest in any proposal for the waiver of particular treaty rights, they should consult together with a view to arriving, in so far as possible, at a common policy.

Resolutions and Statements Regarding Monetary and Financial Questions.—The Conference agreed that a rise throughout the world in the general levels of wholesale prices was in the highest degree desirable, and that for dealing with the problem in its widest aspects international action was urgently necessary.

The Conference also considered what action should be taken by the nations of the Commonwealth to help toward raising prices. In this connection the Chancellor of the Exchequer made the following statement on behalf of the United Kingdom:—

> "His Majesty's Government desire to see wholesale sterling prices rise. The best condition for this would be a rise in gold prices and the absence of a rise in gold prices inevitably imposes limitations on what can be done for sterling. A rise in prices cannot be effected by monetary action alone, since various other factors which have combined to bring about the present depression must also be modified or removed before a remedy is assured. His Majesty's Government nevertheless recognize that an ample supply of short-term money at low rates may have a valuable influence, and they are confident that the efforts which have successfully brought about the present favourable monetary conditions can and will, unless unforeseen difficulties arise, be continued."

The Conference in welcoming this statement recommended that the other countries of the Commonwealth should act in conformity with the line of policy as set out in it.

The Conference, further, recognized the great importance to traders of stability of exchange rates over as wide an area as possible. The complete solution of this problem was, however, dependent on the restoration of conditions for the satisfactory working of an international standard. In the meanwhile, and pending such a solution, the Conference considered the possibility of achieving valuable results in two directions—first by creating an area of stability among countries regulating their currencies in relation to sterling; and secondly, by avoiding wide day-to-day fluctuations between sterling and gold.

As regards the latter, the Conference noted with satisfaction that the United Kingdom had already established machinery aimed at preventing wide fluctuations in the gold value of sterling caused by speculative movements. As to the former, the Conference recognized the value of the countries within the Commonwealth whose currencies were linked to sterling maintaining stability between their exchange rates and looked to a rise in the general level of wholesale prices as the most desirable means for facilitating this result.

The Conference recognized that the ultimate aim of monetary policy should be the restoration of a satisfactory international monetary standard. Such a standard should so function as not merely to maintain stable exchange rates between all countries, but also to ensure the smooth and efficient working of the machinery of international trade and finance.

This postulated international agreement among the great trading nations of the world, and while certain of the States represented held very definite views on the question of the most desirable standard, the Conference refrained from making any recommendations on the subject in view of the fact that the question was shortly to be discussed at an international conference. It was agreed, however, that there were several conditions precedent to the re-establishment of any international monetary standard. The most important among them was a rise in the general level of commodity prices in the various countries to a height more in keeping with the level of costs, including the burden of debt and other fixed and semi-fixed charges;

and an adjustment of the factors political, economic, financial and monetary, which caused the breakdown of the gold standard in many countries, and which, if not adjusted, would inevitably lead to another breakdown of whatever international standard might be adopted.

Resolutions and Statements Regarding Methods of Economic Co-operation.—The Committee considering the question of methods of economic co-operation set up sub-committees on Industrial Standardization, Grading and Standards of Agricultural Products, Industrial Co-operation, Films and Radio, and on the Existing Machinery for Economic Co-operation. The resolutions accepted by the Conference on these subjects were based on the reports of the above sub-committees.

1. Resolutions Concerning Industrial Standardization.—The Conference recommended the observation of certain enumerated principles with a view to assisting the co-ordination of national standardization. In respect of steel, timber, industrial chemical products and replaceable parts of agricultural implements and machinery, it was recommended that immediate steps should be taken by the central standardizing bodies in those parts of the Commonwealth affected to secure a greater degree of uniformity in standard specifications and trade practices.

In order to maintain closer liaison in standardizing matters, the Conference recommended that the central standardizing bodies in the different parts of the Commonwealth should be authorized to call together, periodically or otherwise, representatives in their respective countries of the corresponding bodies, or persons otherwise designated for the purpose.

2. Grading and Standards of Agricultural Products.—The Conference recommended various measures designed to further the adoption of improved grading and standardization. It was felt that the British Commonwealth of Nations should work towards the adoption of uniform standards for those agricultural products which experience had shown most readily lend themselves to standardization. In order to facilitate the unification of Commonwealth grade-standards arrangements should be made for the exchange of memoranda describing in detail the grade-standards in existence in the different countries concerned.

3. Resolutions Concerning Industrial Co-operation.—The Conference felt that the object of co-operation in this field was not to arrest change, but wisely to direct and facilitate its course. The object of any policy of industrial co-operation within the Commonwealth should be to secure the best division of industrial activities among the several parts of the Commonwealth and the ordered economic development of each part, with a view to insuring the maximum efficiency and economy of production and distribution.

The precise nature and extent of the co-operation to be achieved in any particular industry must largely depend upon effective consultation between those engaged or proposing to engage, in that industry in any two or more parts of the Commonwealth.

The Conference therefore recommended to the various industries in which conditions were suitable for the purpose, the desirability of making arrangements for such consultation at the earliest possible date; but it recorded its belief that such consultation, to be fully effective, should be conducted between responsible persons or bodies adequately representative of the industry in each part of the Commonwealth concerned.

The Conference further recommended that the Governments concerned should facilitate and assist such consultations by all available means.

4. Resolutions Concerning Films and Radio.—The Report of the Sub-Committee on this subject, which was commended to the consideration of Governments, emphasized the need for the continued development of radio and film facilities throughout the Commonwealth, and the connection of these forms of instruction and entertainment not only with the commercial development but with the cultural development and the general outlook of the peoples of the Commonwealth. Gratification was expressed at the substantial progress made in the exhibition of Commonwealth films not only in respect to quantity but in respect to quality. In some parts of the Commonwealth this was ascribed to the quota system which required that a stipulated proportion of such films be exhibited. It was recommended that close contact should be maintained between Commonwealth producers and the censorship authorities in the different countries, in order that the former might know the conditions of censorship obtaining in each part.

In respect to radio, closer liaison between the responsible bodies controlling radio in all parts of the Commonwealth was urged. It was felt that this would assist towards the ideal of ensuring accessibility to the whole Commonwealth of all material and programs of general interest.

5. Resolutions Concerning Existing Machinery for Economic Co-operation.—The Conference, having discussed the question of Economic Consultation and Co-operation within the Commonwealth, and having considered a report prepared for it on the constitution and functions of existing agencies, recommended that a Committee should be appointed forthwith, consisting of not more than two representatives of each of the participating Governments, to consider the means of facilitating economic consultation and co-operation between the several Governments of the Commonwealth, including a survey of the functions, organization and financial bases of the agencies specified in the annex report, and an examination of what alterations or modifications, if any, in the existing machinery for such co-operation within the Commonwealth were desirable.

The Conference further recommended that the Committee should report to the several Governments represented thereon not later than May 31, 1933, with a view to the consideration of their report by the several Governments not later than September, 1933.

The Committee referred to above met in London in February, 1933, and has submitted its Report to the various Governments.

Resolutions and Statements Regarding the Promotion of Trade within the Commonwealth.—1. Empire Content.—No definite understanding could be reached in the time allotted as to percentage of Empire content necessary to secure preferential tariff treatment, but the Conference drew the attention of the several Governments of the Commonwealth to the importance of this subject, and recommended that it should be investigated, bearing in mind the following principles:

(i) That though it must rest with each Government to decide what standard it will require, a greater degree of uniformity throughout the Commonwealth was desirable;

(ii) The standard required should not be such as to defeat or frustrate the intention of the preferential rate of duty conceded to any class of goods.

2. Export Bounties and Anti-Dumping Duties.—The Conference recognized that export bounties and exchange depreciation adversely affected the value of tariff preferences within the Commonwealth, and expressed the hope that with a rise in the level of commodity prices and with stabilized exchanges such bounties and the special duties which had been adopted as a means of adjusting the situation so created might be withdrawn.

Section 4.—Principal Events of the Year.

Subsection 1.—The Economic and Financial Year.

The situation in respect of international trade and finance showed steady deterioration throughout 1932, largely as the result of the general lack of confidence, the scramble for gold, the increases of tariffs to prohibitive levels, the establishment of quotas and the restrictions imposed by many countries on foreign exchange. In this stress of circumstances, most countries tried by every means in their power to hold the gold in their possession, with the result of further immobilizing the existing gold supply and giving to gold a scarcity value which was very acceptable to the gold producers as tending to encourage production, but was much less satisfactory to the commercial world in general. Thus we find that the aggregate gold value of the recorded international trade of the world, which in 1929 had been in the neighbourhood of $5 billions per month, was reduced in the last quarter of 1932 to about $2 billions per month. Under these conditions, the exports of debtor countries were quite inadequate to meet the interest due on their obligations and the result in many cases was defaults occasioning a further decline of confidence in the ability of countries other than one's own to meet their engagements.

While the depression brought the value of world trade in 1932 down to about 39 p.c. of the value of 1929, yet this was largely the result of the scarcity of gold, the quantity of world trade in 1932 being estimated by the League of Nations at 73·5 p.c. of what it was in 1929 as compared with 84·5 p.c. in 1931 and 93 p.c. in 1930. This disproportion between gold values and physical quantities has been mainly responsible for the abandonment of the gold standard by most of the countries of the world, including in recent months the United States. While it is recognized that gold is by far the most suitable commodity for use in settling international balances, it is felt that there is nothing particularly sacrosanct providing that the weight of the gold dollar or the gold sovereign shall remain for all time to come what they were before the War or between 1925 and 1930. The restoration of the gold standard on a modified and equitable basis is one of the objects of the World Economic Conference sitting at London in June, 1933.

For Canada, indeed, and for the other newer countries of the British Empire, the prospects appeared more favourable than for their competitors outside the Empire. The Empire includes the United Kingdom, the largest importer in the world, which, as the result of the Agreements entered into at the Imperial Economic Conference described in the preceding section, admits the great bulk of Empire products free of duty while imposing customs duties upon the products of foreign countries. The Imperial Conference Agreements gave to Canada an assured market in the greatest importing country in the world and thus tended to promote recovery from the depression.

Agriculture.—Although the farm production of 1932 was notably larger than in the previous year, the continued fall in prices much more than offset this advantage and the total value of production declined further. Since prices of farm products continued to fall slightly faster than the prices of goods necessary to the farmer, the purchasing power of the farmer again declined slightly. The gross agricultural revenue of Canada in 1932 is estimated at $711,898,000 compared with $814,930,000 in the previous year. The net revenue declined from $538,192,000 in 1931 to $428,829,000 in 1932. Acreages under crop increased slightly and there was more uniformity of crop production throughout the country than has been apparent for some years. The western provinces harvested an average wheat crop, which was a large factor in maintaining their farm income, despite lower prices. The average price received by growers for their wheat was 7 to 8 cents lower than for the 1931 crop.

The movement of wheat into world trade has been very slow and there will evidently be a considerable increase in year-end stocks. The more favourable exchange and freight situation has encouraged a better trade in live stock and meats with the United Kingdom. Encouragement is also to be derived from the improvement of prices since the late months of 1932. The wholesale all-commodity index on a 1926 base rose from 64·0 in December 1932 to 66·9 in May 1933, while the index of farm products rose from 42·7 to 51·2 in the same period, thus giving one more instance where farm prices rise first and most rapidly as the country moves out of depression.

Forest Products.—The production of the products of the forest, both in the form of lumber and of pulp and paper, has been greatly curtailed during the current depression. The cut of lumber, which in 1930 amounted to 3,989,421 M ft. b.m., declined to 2,497,553 M ft. b.m. in 1931. While figures are not yet compiled for 1932, an indication of a further serious decline in the latest year is given by the reported quantities of timber scaled in British Columbia, which were 2,332 million bd. ft. in 1930 and declined to 1,710 million bd. ft. in 1931 and to 1,442 in 1932. Pulp and paper production in Canada expanded greatly in the post-war period due to the immense resources of spruce forests and readily available water powers. The productive capacity of Canadian newsprint mills increased from 2,630 tons per day in 1920 to 12,630 tons per day in 1930. Newsprint production was 2,497,952 tons in 1930 and 2,227,052 in 1931, while a preliminary estimate for 1932 indicates a further decline to 1,907,566 tons. The decrease in building operations and the decline in newspaper and other forms of advertising, as a result of the depression, have curtailed the demand for the products of these industries. Furthermore, a large proportion of the annual Canadian production of these forest products is normally exported, so that the industries have been affected by the serious decline in world trade and in world prices. A disturbing factor in the world markets for agricultural and forest products in recent years has been the great increase in the quantities of these commodities exported by Russia. This re-appearance of Russia as a large exporter in direct competition with Canada has seriously reduced both the quantities exported and the prices received by Canadian exporters of these goods, and has been an important element in causing the present curtailment of production in Canada.

Mineral Production.—Canada's mining industry is in excellent condition to take advantage of any rise in the price of metals. During no time in recorded history have the prices of copper, lead and zinc and silver been so low as in the past year and at no time in Canadian history has Canada been better able to produce these metals; large metallurgical plants with the latest equipment were about completed when the decline in prices began. That they have been able to operate successfully is due in large part to efficient management and to successful low-cost metallurgical treatment. Continuous development work has maintained the ore reserves and operating companies are in a position to enlarge their outputs at the first indication of improvement in demand. In 1932 there was a decrease in quantity and a larger decrease in value in all metals except gold and in nearly all non-metallic minerals. The drop in prices of all other metals has been accompanied by a corresponding increase in the price of gold. The exchange situation has also assisted the gold mines and they have been able since September, 1931, to sell the product under extremely favourable conditions. In 1929, Canada's total mineral production was $310,850,246; in 1931 it had declined to $228,029,018 and in 1932 to $182,320,150, a drop of 41 p.c. from 1929. On the other hand, gold production rose from a total of $39,861,663 in 1929 to $63,061,103 in 1932, an increase of 57 p.c., and the impetus gained by its increase in value, enhanced by the premium, has led to the development of new properties and the discovery of new reserves in old mines. All these factors indicate a larger production of gold during the next few years.

The level of employment in the mines was lower than in 1931, but the reduction in personnel was not so pronounced as in some other industrial groups. The employment index in mining, based on the 1926 average as 100, stood at 99·2, compared with 107·7 in the preceding year, while the number of persons on the pay rolls of the co-operating mine operators averaged 44,800 in 1932. Employment in the extraction of metallic ores was maintained in good volume, although activity was rather less than in 1931; coal mining showed a moderate falling-off from the level of the preceding year, while other non-metallic mineral mines were adversely affected by the general dullness in construction.

Hydro-Electric Power.—Although no new water-power development of any size was started during 1932, projects under way at the beginning of the year and completed during the year increased the total installed capacity to 7,045,260 horse-power, or by 378,923 horse-power. More than half of the total has been developed during the past nine years and almost two-thirds of it since the end of 1918. Work is well under way on three large projects totalling 700,000 horse-power, the major part of which should be completed in 1933. The output of both water and fuel electric power plants in Canada during 1932 amounted to 16,007,119,000 kilowatt hours. This was a decrease from the 1931 output of 323,748,000 kilowatt hours, but the decline of 567,135,000 kilowatt hours in exports to the United States more than accounted for this decrease, indicating an increased consumption in Canada. Canada was second only to the United States in the production of electric energy by central electric stations. In Canada 98 p.c. of the output was produced by water power, whereas the ratio in the United States was 40 p.c.

Manufactures.—In spite of the general curtailment in manufacturing since 1929, certain groups of industries have maintained a fairly high level of activity. This is particularly the case with the food and clothing industries. Thus the index of employment (1926 = 100) in manufactures of edible plant products was 110·9 for 1929 and 94·6 for 1932, of edible animal products, 113·8 in 1929 and 101·5 in 1932, and of textile products, 107·2 in 1929 and 97·0 in 1932. This is more or less to be expected since industries providing many of the necessaries of life are included in these groups. Moreover, these same groups did not expand in production during the period from 1923 to 1929 (see pp. 409-410 of this volume) to anything like the same extent that groups producing luxuries and equipment did. On the other hand, nearly all branches of the iron and steel industry have been severely affected by the depression. In the primary section of the industry, the production of pig iron, which reached a high record at 1,080,000 long tons in 1929, dropped to 420,038 tons in 1931 and to 144,130 tons in 1932, while the production of steel, which reached a total of 1,378,000 long tons in 1929, was 672,109 tons in 1931 and 342,788 tons in 1932. In appraising this curtailment, it should be remembered that in 1929 the industry was more actively employed than in any other peace-time year. Since that time the contraction of operations in the construction industry, the drastically reduced expenditures on improvement and equipment forced upon the railways by falling revenues, and the greatly reduced demand for industrial equipment, agricultural machinery and motor vehicles, have all had a depressing effect upon the volume of operations in the primary iron and steel industry. As indicated, this has been partially due to a falling-off in the activity of the secondary iron and steel industries. The index of employment (1926 = 100) in the agricultural implement industry dropped from an average of 115·6 for 1929 to 37·2 for 1931 and 26·0 for 1932, as a direct result of the reduced purchasing power of the agricultural population. The production of motor vehicles in Canada reached a high record in 1929 with a total of 262,625 cars and trucks, but declined to 82,621 in 1931 and 60,816 in 1932, a smaller total than in any year during the period of observation commencing in 1917. This has been the result not only of reduced purchases of cars in the domestic market due to the hard times, but to a large falling-off in exports, which amounted to 102,382 in the calendar year 1929 and only 13,022 in 1932.

Construction.—The decline in construction which was in evidence during 1931 was still more pronounced during 1932. The value of construction contracts awarded during the year was $132,872,000 compared with $315,482,000 in 1931 and $456,999,600 in 1930, a decline of 57·9 p.c. from the 1931 total and 70·9 p.c. from that of 1930. The total was the lowest since 1918. The smallest declines as compared with 1931 occurred in the contracts awarded for public garages, office buildings and warehouses, while residential building showed the greatest falling-off in this comparison. The building permits issued by 61 cities declined from $166,379,325 in 1930 to $112,222,845 in 1931 and $42,319,397 in 1932, or by 74·6 p.c. in the two years.

External Trade.—The external trade of Canada has been affected during the past three years, so far as exports are concerned, by the smaller crops from 1929 to 1931 and the much lower prices obtained for them, as well as by the general trade depression throughout the world. The decline in imports in 1932-33 has been greater than that of exports, the normal position for Canada in a time like the present, when, with heavy interest payments to make abroad, there is no large inflow of foreign capital taking place. Exports during the fiscal year 1933 were $480,713,797 compared with $587,565,517 in 1932 and $1,388,896,075 in 1929, the record year since the War. Imports in the fiscal year 1933 amounted to $406,271,329, compared with $578,503,904 in 1932 and $1,265,679,091 in 1929, which was the peak year for imports.

Railway Transportation.—The passenger traffic of railways in Canada has shown a more or less steady decline during the past decade, but the decline has been greatly accelerated during the past three years and for 1932 it was less than half of the 1929 traffic. Freight traffic has also suffered and would have been considerably less but for the fairly steady flow of grain from the western provinces which was affected less than any other class of freight by the world-wide stagnation. Compared with 1929 traffic the tonnage of agricultural products was reduced by 3·1 million tons, or 14·3 p.c.; animal products was reduced by 0·8 million tons, or 27·2 p.c.; mine products by 22·9 million tons, or 54·0 p.c.; forest products by 9·6 million tons, or 63·4 p.c. and manufactures and miscellaneous freight by 17·7 million tons, or 55·2 p.c. Although the rates on grain are very low, the long haul brings the average revenue per ton up to around $3.40 as against $3.50 for all freight. Gross revenues of the railways, however, were greatly depleted and for 1932 the principal railways showed a decrease of $64,000,000, or 18 p.c., compared with 1931 revenues. Although drastic reductions were made in operating expenses by cutting wages and otherwise, certain maintenance and other expenses had to be maintained irrespective of traffic and net operating revenues were down by $843,000. Car loadings for the first 23 weeks in 1933 were below 1932 loadings by 171,358 cars, or 17·9 p.c., but were improving during May and June, the decrease at the middle of April being 20·2 p.c.; with a large stock of grain in the western country elevators (97 million bushels on June 9) to be moved to make room for the new crop and indications of improvement in other classes of freight, car loadings should pass the 1932 records before the end of the year.

Canal Traffic.—Canal traffic, unlike most of the indexes, showed an increase in 1932, largely owing to the stimulus given by the opening of the Welland Ship Canal. Total freight carried in 1932 was 17,960,650 tons, as compared with 16,189,074 and 14,803,334 tons in 1931 and 1930 respectively. The increases were mainly in the traffic on the Welland and the St. Lawrence canals, and appear to be not unconnected with the decline in railway freight traffic.

Currency and Banking.—The impact of the depression in Canada was much less severe in the purely financial sphere than in the economic, the soundness of the Canadian banking structure being undoubtedly one of the most important individual factors in saving the Dominion from the worst consequences of the depression. The maintenance of confidence in the solvency of the banks is indicated by the fact that the total of notice deposits was larger at the end of December, 1932, than a year earlier, a total of $1,377,520,000 compared with $1,360,042,000 at the end of 1931. The downward trend of current loans during 1932 forms a sharp contrast with the relative stability of notice deposits. Current loans amounted to $964,024,000 at the end of 1932 compared with $1,082,097,000 at the end of 1931. The surplus of notice deposits over current loans at the close of 1932 was consequently $413,496,000 compared with $277,945,000 at the end of 1931. This surplus increased to $486,519,000 ($1,399,542,000 − $913,023,000) at April 30, 1933. Owing to the diminished demand for credit caused by the low level of business operations and the deflation of wholesale prices, the banks have added to their holdings of bonds and high grade securities until the amount at the end of April, 1933, was greater than at any other time in the history of Canadian banking, *viz.*, $805,893,000. The extensive purchase of government bonds by the banks during the current period has been one of the most constructive factors toward counteracting the influence of the depression. The absence of hoarding of currency shows the confidence of the people of Canada in their currency and banking system. During 1932 the total notes in the hands of the public varied only between $139,500,000 in November and $154,900,000 in June. The latest available figure is $153,150,000 in April, 1933.

Interest Rates.—As the interest rate on current and call loans in Canada is fairly well stabilized, the trend of interest rates may be determined by the prices of high-grade bonds and those of the Ontario Government have been used as representative, its bonds having been subject to the Dominion's war income tax throughout. The yield on Ontario Government bonds reached a high point at 5·00 p.c. in May and September, 1929, and declined to 4·50 p.c. in December, 1930. There was a further decline to 4·40 p.c. by September, 1931, after which the rate rose steeply to 5·20 p.c. in December, 1931, and 5·74 p.c. in January, 1932. A declining trend was in evidence again in 1932, the rate in the final month being 4·92 p.c., falling still farther to 4·70 p.c. in May 1933.

Prices.—The general trend of prices during 1932 was downward, though the decline was not so steep as in 1931. The index number of wholesale prices, on the base of 1926 equals 100, fell from 70·4 in December, 1931, to 64·0 in December, 1932. A reversal of trend was apparent in the early months of 1933, the index number rising from 63·4 in February to 67·6 in June; this rise is generally considered to indicate the arrival of better times.

Subsection 2.—Other Principal Events of the Year.

Provincial General Election.—The Eighteenth Legislature of the Province of Manitoba was dissolved on May 7, 1932, and a general election took place on June 16, 1932, resulting in the retention of the Bracken Government in power. The voting in the city of Winnipeg was conducted by the method of proportional representation.

St. Lawrence Deep Waterway Treaty.—A Treaty providing for the construction of a deep waterway not less than 27 feet in depth for navigation from the interior of the continent of North America through the Great Lakes and the St. Lawrence river to the sea, with the development of the water power incidental thereto, was signed in Washington by the Canadian Minister in Washington and the Secretary of State of the United States on July 18, 1932. This Treaty had not been ratified by the United States Senate up to the end of June, 1933.

Official Opening of the Welland Ship Canal.—The new Welland Ship Canal was officially opened by the Governor General of Canada on Aug. 6, 1932, during the Imperial Economic Conference. The Heads of the various Delegations to the Conference joined in congratulating Canada on this great engineering achievement.

The general dimensions of the new canal are as follows: length, lake to lake, 25 miles; width at water line, 310 feet; width at bottom, 200 feet; depth of canal, 25 feet; depth at lock sills, 30 feet; number of lift locks, 7; usable length of locks, 820 feet; usable width, 79 feet; lift of each lock, 46·5 feet; total lift, 325·5 feet.

As the result of the construction of the canal, the largest vessels on the upper lakes are now able to go down into lake Ontario and down the St. Lawrence river as far as Prescott where a large elevator has been constructed to handle grain on its way to the sea.

Subsection 3.—Obituary.

1932.—(See also pp. 1003-1004 of the 1932 Year Book.) June 3, Lt.-Col. Alex. Montgomerie, C.B.E., Halifax, N.S., former M.L.A. for Halifax. June 6, Hon. Henry Miles, Montreal, P.Q., former member Legislative Council for Victoria. June 7, Thomas McMillan, Stratford, Ont., M.P. for South Huron. June 13, Frederick W. Babington, Ottawa, Ont., B.Sc., F.C.I.C., F.C.S., former Chief Analyst, Department of Customs. July 1, Arthur Gilbert, former M.P. for Drummond-Arthabaska, Que. July 3, Chas. T. Thornton, Otono, Ont., former M.P. for Durham. July 6, C. Noel Wilde, Mexico City, Mexico, Canadian Trade Commissioner to Mexico. July 10, Hon. H. A. McKeown, Westfield, N.B., late Chairman of the Board of Railway Commissioners and former Chief Justice of the Supreme Court of N.B. July 11, Michael Manson, M.L.A. for Mackenzie, B.C. July 19, Hon. Vernor W. Smith, Edmonton, Alta., Minister of Railways and Telephones in the Government of Alberta; Col. Allison H. Borden, Grand Pré, N.S., Commander of the Nova Scotia Highland Brigade during the Great War. July 27, Russell T. Ferrier, M.A., Ottawa, Ont., Superintendent of Indian Education, Department of Indian Affairs. Aug. 1, Hon. John Fosbery Orde, K.C., Toronto, Ont., Justice of the Court of Appeal in the Supreme Court of Ontario; Hon. W. B. Willoughby, Moose Jaw, Sask., Senator for Moose Jaw. Aug. 7, Hon. Napoleon Antoine Belcourt, K.C., LL.M., LL.D., Ottawa, Ont., Senator for Ottawa. Aug. 23, Dr. David Warnock, former M.P. for Macleod, Alta. Sept. 7, Col. W. R. Smyth, O.B.E., Rydal Bank, Ont., former M.P. for East Algoma.

Sept. 18, Hon. Frank Egerton Hodgins, B.C.L., Toronto, Ont., Justice of the First Appellate Court and Judge of the Admiralty Court. Sept. 23, Hugh Bolton Morphy, K.C., Listowel, Ont., former M.P. for North Perth. Sept. 26, Philip Thomas Ahern, Ottawa, Ont., Private Secretary to the Solicitor-General; Louis Euclide Côté, Ottawa, Ont., Chief Engineer of the Department of Marine; Sir Percy Girouard, Montreal, P.Q., former Director-General of Munitions supply for the British forces. Oct. 10, Charles E. Hanna, Belleville, Ont., former M.P. for South Hastings. Oct. 20, Dr. Edward Archibald Robertson, Montreal, P.Q., Head Examiner of the Board of Pension Commissioners. Oct. 21, Hon. Mr. Justice James Gordon Forbes, Toronto, Ont., Member of the New Brunswick Bench. Oct. 24, Francis Joseph Plant, Ottawa, Ont., Chief of the Labour Intelligence Branch, Department of Labour. Nov. 7, Dr. Dugald Stewart, Bridgewater, N.S., former M.P. for Lunenburg. Nov. 8, Frank H. Phippen, K.C., Toronto, Ont., former Justice of the Appeal Court of Manitoba. Nov. 10, James John Edmund Guérin, M.D., Montreal, P.Q., ex-M.P. for St. Ann; Hon. Andrew Haydon, Ottawa, Ont., Senator for Lanark. Nov. 11, Hon. William Patterson, Montreal, P.Q., Judge of the Supreme Court of Quebec. Nov. 15, R. A. Tison, Montreal, P.Q., Deputy Registrar of the Bankruptcy Court and Deputy Prothonotary of the Superior Court of Quebec and former Editor-in-Chief of the *Canada Gazette*. Nov. 18, Hon. Narcisse Perodeau, Montreal, P.Q., former Lieutenant-Governor of the Province of Quebec. Dec. 14, Hon. James Hamilton Ross, Moose Jaw, Sask., Senator for Moose Jaw. Dec. 27, Hon. Irving R. Todd, Milltown, N.B., Senator for Charlotte; W. H. Blow, M.D., C.M., Vancouver, B.C., former M.L.A. for South Calgary, Alta. **1933.**—Jan. 1, Hon. D. Inglis Grant, Toronto, Ont., Justice of the Court of Appeal of the Supreme Court of Ontario. Jan. 11, Hon. J. W. Daniel, Saint John, N.B., Senator for Saint John. Jan. 14, Maximilian D. Cormier, Edmundston, N.B., M.P. for Restigouche-Madawaska. Jan. 17, Hon. W. E. Perdue, Winnipeg, Man., former Chief Justice of the Manitoba Court of Appeal. Jan. 23, Hon. Jacques Bureau, K.C., Montreal, P.Q., Senator for La Salle. Feb. 4, Joseph Savoie, Sherbrooke, P.Q., M.L.A. for Nicolet. Feb. 7, C. E. Therrien, Montreal, P.Q., Sheriff of Sherbrooke and former M.L.A. Mar. 2, Rt. Hon. Francis Alexander Anglin, K.C., LL.D., Ottawa, Ont., retired Chief Justice of the Supreme Court of Canada. Mar. 14, Sir Henry W. Thornton, K.B.E., New York, U.S.A., former President of the Canadian National Railways. Mar. 29, Joseph Girouard, Montreal, P.Q., former M.P. for Two Mountains. Mar. 31, Hon. Thomas Fortin, Sainte Rose, Que., retired Judge of the Superior Court of Quebec and former M.P. for Laval; William M. German, Welland, Ont., former M.P. for Welland; Hon. Frank Oliver, Ottawa, Ont., former Minister of the Interior and Railway Commissioner. April 14, Sir Daniel McMillan, K.C.M.G., LL.D., C.B.E., M.D., Winnipeg, Man., former Lt.-Gov. of Manitoba. April 15, Col. Lorne Drum, Assistant Director of Medical Services, C.E.F. April 16, Hon. Achille Bergevin, Montreal, P.Q., former member of the Legislative Council and Legislative Assembly of Quebec. April 18, Judge W. W. Wells, Ottawa, Ont., former Judge of the County Court of Westmorland and Kent, N.B. April 23, Kenneth A. Blatchford, Edmonton, Alta., former M.P. for East Edmonton. April 26, William H. Walker, C.M.G., I.S.O., B.A., Assistant Under-Secretary of State, Department of External Affairs. May 2, Michael J. Walsh, Montreal, P.Q., former M.L.A. for St. Ann. May 3, Mrs. Mary Ellen Smith, Vancouver, B.C., former M.L.A. for Vancouver and Minister without Portfolio in the Oliver Cabinet; W. J. O'Hearn, K.C., Halifax, N.S., Judge of the County Court of Halifax and former Attorney-General of Nova Scotia.

May 11, Daniel Strath, Sceptre, Sask., M.L.A. for Happyland. May 14, Richard D. Ponton, Belleville, Ont., Judge of the County Court of Victoria and Haliburton; D. W. Warner, Edmonton, Alta., former M.P. for Strathcona. May 25, Samuel W. Huston, North Battleford, Sask., M.L.A. for Battleford. May 28, Hon. Helma H. Bryn, Montreal, P.Q., Consul General for Norway. May 30, Thos. M. Cayley, Norwich, Ont., M.P. for Oxford South; Dr. A. F. Rykert, Dundas, Ont., former M.L.A. for North Wentworth. June 4, W. J. McCart, Toronto, Ont., former M.L.A. for Stormont. June 6, Major-Gen. the Hon. Justice W. A. Logie, C.B., V.D., Toronto, Ont., of the High Court Division of the Supreme Court of Ontario; Thos. S. Davidson, Paris, Ont., former M.L.A. for North Brant. June 12, Joseph Octave Réaume, M.D., former Minister of Public Works for Ontario. June 13, Archie Esplen, Dauphin, Man., former M.L.A. for Dauphin. June 19, Hume Cronyn, K.C., London, Ont., former M.P. for London. June 20, Hon. Philippe J. Paradis, Quebec, Que., Senator for Shawinigan. June 22, Matthew J. Butler, Sydney, N.S., former Deputy Minister of Railways and Canals. June 24, David W. Bole, Winnipeg, Man., former M.P. for Winnipeg. July 2, Alexander Rogers, Hopewell Hill, N.B., former M.P. for Albert.

Section 5.—Extracts from the Canada Gazette—Official Appointments, Commissions, etc.

Note.—This list is in continuance of that at pp. 1007-1011 of the 1932 Year Book.

Lieutenant-Governors, 1932.—Oct. 25, Colonel Herbert Alexander Bruce, R.A.M.C., M.D., F.R.C.S. (Eng.), Toronto, Ont.; to be, from Nov. 1, 1932, Lieutenant-Governor of the Province of Ontario.

Senators, 1932.—Oct. 6, Albert Joseph Brown, K.C., Montreal, P.Q. Joseph Hormisdas Rainville, B.A., LL.B., St. Lambert, P.Q.

New Members of the House of Commons, Seventeenth Parliament, 1932.—June 27, Joseph Jean, K.C., elected for Maisonneuve (Island of Montreal) Que.; Hon. George Burpee Jones, elected for Royal, N.B. Oct. 3, William H. Golding, elected for Huron South, Ont.

Official Appointments, 1932.—July 26, Samuel J. Hungerford, Esq., Montreal, P.Q., Vice-President of the Canadian National Railway Company; to be a Director of the Canadian National Railway Company. Aug. 23, Dr. J. G. Fitzgerald, Director, School of Hygiene and Connaught Laboratories, Toronto, Ont.; to be re-appointed a member of the Dominion Council of Health, to date from Sept. 1, 1932. Sept. 14, William J. Reilly, Esq., Toronto, Ont., Registrar in Bankruptcy at the Supreme Court of Ontario; to be Superintendent of Bankruptcy for the Dominion of Canada. Oct. 5, The Rt. Hon. Sir George H. Perley; to be Acting Secretary of State, during the absence of the Secretary of State of Canada. Hector Willoughby Charlesworth, Esq., Toronto, Journalist; Thomas Maher, Esq., Quebec, Engineer; and Lt.-Col. William Arthur Steel, M.C., Ottawa; to be members of the Canadian Radio Broadcasting Commission, the said Hector Willoughby Charlesworth to be Chief Commissioner and Chairman and Thomas Maher to be Vice-Chairman. Oct. 6, Alphonse Raymond, Esq., Montreal; to be a member of the Board of Harbour Commissioners of Montreal, *vice* Joseph H. Rainville, resigned. Oct. 8, George Samuel Horace Barton, D.Sc.A., Dean of Macdonald College, Ste. Anne, P.Q.; to be Deputy Minister of Agriculture. Oct. 13, Harold Wigmore McGill, M.C., M.D., Calgary, Alta.; to be Deputy Superintendent-General of

Indian Affairs. Oct. 24, William Clifford Clark, Esq., M.A., Kingston, Ont.; to be Deputy Minister of Finance and Receiver-General. Oct. 25, Frank McKenna, Esq., Montreal, P.Q.; to be a member of the Dominion Council of Health, effective from Sept. 1, 1932. Nov. 2, Lt.-Col. Léo Richer LaFlèche, D.S.O., A.D.C., to be Deputy Minister of National Defence. Nov. 7, The Hon. Robert Smith, one of the Judges of the Supreme Court of Canada; to be a Deputy of His Excellency the Governor General. Nov. 24, Andrew William Argue, M.A., M.D., Grenfell, Sask.; Campbell Laidlaw, B.A., M.D., F.R.C.P.C., Ottawa, Ont.; and Frank B. Patterson, M.D., F.R.C.S. (Edin.), Vancouver, B.C.; to be Members of the Medical Council of Canada for four years from Nov. 26, 1932. **1933.**—Jan. 17, Hon. Edouard F. Surveyer, Judge of the Superior Court, Montreal; to be a member of the Historic Sites and Monuments Board of Canada, *vice* Mr. Maréchal Nantel, resigned. Feb. 6, The Hon. Geo. Herbert Sedgewick, a Justice of the High Court of Justice of Ontario, Toronto, Ont.; Milton Neil Campbell, Esq., M.P., Pelly, Sask.; Charles Hébert, Esq., B.A., Montreal, P.Q., wholesale grocer; to be members of the Tariff Board, Mr. Justice Sedgewick to be Chairman and Mr. Milton Neil Campbell, Vice-Chairman. Feb. 11, The Hon. Martin Burrell, of the City of Ottawa, and Felix Desrochers, Esq., K.C., of the City of Montreal; by joint commission to be Librarians of Parliament, the Honourable Martin Burrell to be Parliamentary Librarian and Felix Desrochers to be the General Librarian. Feb. 25, Elmer Bigelow Hosmer, Esq., Montreal, Que.; to be a member of the Board of Trustees of the National Gallery of Canada, *vice* Newton MacTavish, Esq., resigned. April 3, Charles Heber Bland, B.A., Ottawa, Ont.; to be a member of the Civil Service Commission of Canada from April 1, *vice* Newton MacTavish, Esq., retired. April 15, The Hon. John Alexander Mathieson, Chief Justice of the Supreme Court of Prince Edward Island; to be administrator of the Government of the said Province during the absence of the Honourable the Lieutenant-Governor from April 15. April 26, The Hon. Horace Harvey, Edmonton, Chief Justice of Alberta; to be administrator of the Government of the Province of Alberta from May 1 during the absence of the Hon. the Lieutenant-Governor. May 1, Dr. G. S. H. Barton, Deputy Minister of Agriculture, Ottawa, Dr. Charles Camsell, Deputy Minister of Mines, Ottawa, Dr. A. L. Clark, Dean, Faculty of Applied Science, Queen's University, Kingston, Ontario, Dr. A. Frigon, Dean, Ecole Polytechnique, University of Montreal, and Dr. Julian C. Smith, Shawinigan Water and Power Company, Montreal, P.Q.; to be members of the National Research Council for a period of three years expiring Mar. 31, 1936. May 31, Mrs. Helen Hooper, 13 Pine Street, Saint John, N.B.; to be a member of the Dominion Council of Health. June 9, Madame Marie Gérin-Lajoie, 30 Elmwood Ave., Outremont, Quebec; to be a Member of the Dominion Council of Health. Mrs. Helen Vincent, 5 Garden St., Saint John, N.B., to be a Member of the Dominion Council of Health, *vice* Mrs. Helen Hooper, resigned.

Honorary Aides-de-Camp, 1932.—April 28, Lieut.-Colonel F. A. S. Dunn, Alberta University Contingent Canadian Officers Training Corps, Edmonton, Alta. Dec. 3, Assistant Commissioner (Hon. Lieut.-Colonel C.M.) G. L. Jennings, O.B.E., Royal Canadian Mounted Police, effective Nov. 30, 1932. Dec. 9, Lt.-Col. L. R. LaFlèche, D.S.O., resigns as Honorary Aide-de-Camp with effect from Nov. 11, 1932, on appointment as Deputy Minister, Department of National Defence. **1933.**—June 2, Colonel H. C. Osborne, C.M.G., V.D., Reserve of Officers, effective May 30, 1933.

Judicial Appointments, 1932.—May 31, Alexander B. Campbell, Esq., Jasper, Alta.; to be Stipendiary Magistrate within Jasper National Park. David Gray Wilson, Esq., Banff, Alta.; to be Stipendiary Magistrate within Banff National Park. June 3, His Honour Judge Thomas Gallant, Gravelbourg; to be District Court Judge for the Judicial District of Assiniboia, Sask. His Honour Judge Cecil Howard Bell; to be District Court Judge for the Judicial District of Battleford, Sask. June 8, The Hon. Joseph Andrew Chisholm, Chief Justice of the Supreme Court of Nova Scotia; to investigate certain complaints bearing on the conduct of His Honour Judge Martell, County Court Judge for District 4, Nova Scotia. June 16, Major David Livingstone McKeand of Ottawa, Ont., Officer in Charge of the Expedition to the Northern Archipelago; to be a Justice of the Peace in and for the Northwest Territories with the powers and authorities of two Justices of the Peace under any law or ordinance, civil or criminal, in force in the said Territories. June 17, James M. Douglas, Esq., of Edmonton, Alta.; to be a Stipendiary Magistrate for the Northwest Territories. Aug. 23, The Hon. Mr. Justice Joseph Charles Walsh, of the City of Montreal, a Puisne Judge of the Superior Court for the Province of Quebec; to be a Puisne Judge of the Court of King's Bench for the said Province. Francis Joseph Curran, Esq., of the City of Montreal; to be a Puisne Judge of the Superior Court in and for the Province of Quebec. Wilfred Laliberté, Esq., of the Town of Victoriaville, Quebec; to be a Puisne Judge of the Superior Court in and for the Province of Quebec. Herbert Warren Sangster, Esq., Windsor, N.S.; to be a Judge of the County Court for District No. 4 comprising the Counties of Kings, Hants and Colchester in the Province of Nova Scotia. Aug. 26. Arthur Courtney Kingston, Esq., of the City of St. Catharines, Ont.; to be a Judge of the High Court of Justice for Ontario. Sept. 21, Joseph Léon St. Jacques, Esq., Montreal, P.Q., to be a Puisne Judge of the Court of King's Bench in and for the Province of Quebec. The Hon. Joseph Mathias Tellier, a Puisne Judge of the Court of King's Bench in and for the Province of Quebec; to be Chief Justice of the Court of King's Bench of the said Province. The Hon. Oswald Smith Crocket, a Puisne Judge of the King's Bench Division of the Supreme Court of N.B.; to be a Puisne Judge of the Supreme Court of Canada. Sept. 27, Patrick Kerwin, Esq., Guelph, Ont.; to be a Judge of the High Court of Justice for Ontario. Oct. 7, The Hon. Mr. Justice Ward Chipman Hazen Grimmer, Judge of the Appellate Division of the Supreme Court of New Brunswick; to be Judge of the Court of Divorce and Matrimonial Causes of New Brunswick. Oct. 31, Richard D. Ponton, Esq., Belleville, Ont., one of His Majesty's Counsel learned-in-the-law; to be Judge of the County Court of the Counties of Victoria and Haliburton, and a local Judge of the High Court of Justice for Ontario, effective Dec. 1, 1932. Dec. 1, Finlay Ewart Perrin, Esq., London, Ont., one of His Majesty's Counsel learned-in-the-law; to be Judge of the County Court of the County of Oxford in the Province of Ontario, and to be a Local Judge of the High Court of Justice of Ontario. Dec. 2, Errol Malcolm William McDougall, Esq., of Montreal, P.Q., one of His Majesty's Counsel learned-in-the-law; to be a Puisne Judge of the Superior Court in and for the Province of Quebec. Dec. 7, His Honour Judge Frank M. Field, a Junior Judge of the County of York, in the Province of Ontario; to be Local Judge in Admiralty of the Exchequer Court for the Toronto Admiralty District. **1933.**—Jan. 5, Henry Hague Davis, Esq., K.C., Toronto, Ont.; to be a Justice of the Court of Appeal and *ex officio* a Judge of the High Court of Justice for Ontario. Jan. 17, Noel Belleau, Esq., K.C., Lévis, P.Q.; to be a Puisne Judge of the Superior Court in and for the Province of Quebec. Jan. 24, William Edward Fisher, Esq., Prince Rupert, B.C., barrister-at-law; to be Judge of the County Court of Prince Rupert in the said Province and a Local Judge of the Supreme Court of B.C. Jan. 30, Andrew M. Harper, Esq., Vancouver, B.C., barrister-at-law; to be Judge of the County Court of Vancouver and a Local Judge of the Supreme Court of B.C. Feb. 1, The Hon. Mr. Justice Joseph Archambault, Puisne Judge of the Superior Court of the Province of Quebec, for the District of St. Francis; to be a Puisne Judge for the District of Montreal, succeeding the Hon. Mr. Justice Louis Edmond Panneton, resigned. Hector Verret, Esq., K.C., of Coaticook, P.Q.; to be a Puisne Judge of the Superior Court of the Province of Quebec for the Judicial District of St. Francis. Feb. 25, Percy John Jennings, Superintendent, Banff National Park, and Joseph Luke Horsfall, Principal Clerk, Banff National Park; to be Justices of the Peace for the purposes of the National Parks Act. Mar. 17, The Rt. Hon. Mr. Justice Lyman Poore Duff, one of the Puisne Judges of the Supreme Court of Canada; to be Chief Justice of Canada. Eric Armour, Esq., K.C., Toronto, Ont.; to be a Judge of the High Court of Justice for Ontario. Mar. 28, Fawcett Gowler Taylor, Esq., K.C., Portage la Prairie, Man.; to be a Judge of His Majesty's Court of King's Bench for Manitoba. April 13, Joseph Lawrence Ryan, Esq., Bathurst, N.B., barrister-at-law; to be Judge of the County Court for the Counties of Northumberland, Gloucester and Restigouche, N.B., effective April 15, 1933. June 2, The Honourable Charles Dow Richards, Fredericton, N.B., one of His Majesty's Counsel learned-in-the-law; to be a Judge of the King's Bench Division of the Supreme Court of New Brunswick. Henry Walter Whitla, Esq., Winnipeg, Man., one of His Majesty's Counsel learned-in-the-law; to be Senior Judge of the County Court for the Eastern Judicial District of the Province of Manitoba. Joseph Bernier, Esq., Winnipeg, Man., barrister-at-law; to be Junior Judge of the County Court for the Eastern Judicial District of the Province of Manitoba, effective June 15, 1933.

Commissioners, 1932.—June 22, Stanislas Albert Baulne, Montreal, Que., Civil Engineer; to be a Commissioner to inquire into all matters pertaining to an explosion in the drydock of the Maisonneuve plant of the Canadian Vickers, Ltd., on Friday, June 17, 1932. July 13, A. S. Black, Esq., Principal Postal Clerk, Vancouver, B.C.; to be a Commissioner to administer the Oath of Allegiance and of Office to employees of the Vancouver Post Office. July 20, Colin Fraser Elliott, Esq., K.C., Ottawa, Ont.; to be Commissioner of Income Tax. July 26, C. A. Pariseault, Esq., Montreal, barrister; to investigate such charges of political partizanship against Dominion Government employees in the Province of Quebec as may be referred to him. Sept. 14, John Hascoll Frederick English, Esq., Canadian Trade Commissioner, Dublin, Irish Free State; to be a Commissioner to administer oaths and take affidavits, declarations and affirmations in the Irish Free State, concerning any proceedings had or to be had in the Supreme Court of Canada and any other such oaths as may be competent for His Excellency in Council to authorize within the I.F.S. Sept. 27, The Hon. Mr. Justice Frank Ford, a Puisne Judge of the Supreme Court of Alberta; to make inquiries into the circumstances respecting the alleged misbehaviour of His Honour Lewis St. George Stubbs, Judge of the County Court for the Northern Division of the Eastern Judicial District in the Province of Manitoba. Oct. 13, John Campbell MacGillivray, Esq., Canadian Trade Commissioner, Rotterdam, Holland; to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in the Kingdom of Holland in or concerning proceedings in the Supreme or Exchequer Court of Canada and such other oaths, etc., as it may be competent for His Excellency in Council to authorize within the Kingdom of Holland. Nov. 30, His Excellency the Governor General in Council has been pleased to authorize the issue of a Writ of Supersedeas cancelling the Commission appointing the Hon. Mr. Justice Frank Ford, a Puisne Judge of the Supreme Court of Alberta, dated Sept. 27, 1932, to make inquiries and report respecting certain complaints against the conduct of His Honour Lewis St. George Stubbs, a Judge of the County Court in Manitoba: and has been pleased to authorize the issuance of a new Commission to the Honourable Mr. Justice Ford to investigate any and all complaints against His Honour Judge Lewis St. George Stubbs, by Judges of the Supreme Court of Manitoba or the Attorney-General of the said Province from the date of his appointment as a County Judge up to and including Nov. 29, 1932. Dec. 7, Charles Prescott Dunn, Esq., Postmaster at Yarmouth, N.S.; to administer the Oath of Allegiance and of Office to employees of the Post Office Department at Yarmouth. Dec. 17, John Cormack, Esq., Canadian Trade Commissioner at Dublin, Irish Free State; to be a Commissioner to take and receive affidavits, declarations and affirmations in the Irish Free State concerning proceedings in the Supreme and Exchequer Courts of Canada and any other such oaths, etc. as may be competent for His Excellency in Council to authorize within the Irish Free State. Dec. 24, J. C. Martineau, Esq., Lévis, P.Q.; to administer the Oath of Allegiance and of Office to new employees entering the Lévis Post Office. **1933.**—Jan. 5, Robert Wakefield Ward, Esq., Postmaster, Lethbridge, Alberta; to administer the Oath of Allegiance and of Office to new employees entering the Lethbridge Post Office. Jan. 24, His Excellency the Governor General in Council has been pleased to cancel the Commission dated Dec. 17, 1932, issued by error in the name of John Cormack, Esq., described as Dominion Trade Commissioner at Dublin, I.F.S., and authorizing him to administer oaths concerning actions in the Supreme and Exchequer Courts of Canada and to direct the issue of a new Commission appointing James Cormack, Esq., Dominion Trade Commissioner at Dublin, I.F.S., to administer the aforesaid oaths. April 8, Ralph McDonald Spankie, Esq., K.C., Deputy Registrar of the Exchequer Court of Canada; to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in any proceedings in the Supreme and Exchequer Courts of Canada. April 8, Paul C. Quinn, Esq., Saint John, N.B.; to be a Commissioner to investigate such charges of political partizanship against Government employees as may be referred to him.

Day of General Thanksgiving.—Monday, Oct. 10, 1932, was appointed by proclamation as a "day of general thanksgiving to Almighty God for the bountiful harvest and other blessings with which Canada has been favoured this year".

APPENDIX I.

1.—Immigration in the fiscal year 1932-33.

During the fiscal year ended March 31, 1933, the immigrants into Canada, classified as in the summary table appearing on p. 187 of this volume, were as follows: From U.K., 3,097; from U.S.A., 13,196; from other countries, 3,589; total, 19,872.

Canadians returned from the United States during the fiscal year ended March 31, 1933, classified as in the table on p. 200, were as follows: Canadian-born, 16,320; British-born with Canadian domicile, 757; naturalized Canadian citizens, 548; total, 17,625.

2.—External Trade of Canada in the fiscal year 1932-33.

Preliminary figures of the external trade of Canada for the fiscal year ended Mar. 31, 1933, show a grand total trade of $886,985,126, as compared with a figure of $1,166,069,421 in the preceding year, or a decrease of $279,084,295. The decrease in the imports was $172,232,575. Domestic exports decreased by $102,544,347, and foreign exports by $4,307,373. Figures by industrial groups are given in the following table, where the figures of imports and exports may be compared with the totals given for previous years in the tables on pp 516, 524-525 of this volume.

Imports and Exports of Canada, fiscal year ended Mar. 31, 1933.

Industrial Group.	Imports.
	$
Agricultural and vegetable products	88,220,858
Animals and animal products	15,438,577
Fibres, textiles and textile products	61,214,824
Wood, wood products and paper	20,489,242
Iron and its products	59,336,765
Non-ferrous metals and their products	17,684,958
Non-metallic minerals and products	87,658,005
Chemicals and allied products	25,455,432
Miscellaneous commodities	30,772,668
Total Imports	**406,271,329**
Total, Dutiable Imports	256,349,685
Total, Free Imports	149,921,644
Duty Collected	77,028,992

Imports and Exports of Canada, fiscal year ended Mar. 31, 1933—concluded.

Industrial Group.	Exports.
	$
Agricultural and vegetable products	203,370,418
Animals and animal products	54,333,047
Fibres, textiles and textile products	4,731,094
Wood, wood products and paper	120,886,796
Iron and its products	17,277,099
Non-ferrous metals and their products	42,642,318
Non-metallic minerals and products	9,215,837
Chemicals and allied products	11,099,814
Miscellaneous commodities	10,243,532
Total, Domestic Exports	473,799,955
Total, Foreign Exports	6,913,842
Total Exports	**480,713,797**
Grand Total, External Trade	**886,985,126**

APPENDIX II.

Miscellaneous Statistics of the Census of Agriculture.[1]

Table **1**, following, gives final results of the Census of Agriculture taken as of June 1, 1931, regarding occupied farms, farm areas and values, mortgage indebtedness and farm expenditures. The outstanding feature of the table is the decrease shown in the number of owned farms and the large increases in the other two classes "partly-owned, partly-rented" and "occupied by tenants" as compared with 1921 census. The percentage of all farms fully owned for the whole of Canada has decreased from 86·52 p.c. in 1921 to 80·05 p.c. in 1931. The large acreage in the "partly-owned, partly-rented" type in the western provinces is due to the fact that most ranches are composed of small acreages actually owned and additional large acreages of pasture leased from the governments.

Farm values, when compared with 1921, show that for Canada as a whole they have decreased by 20·33 p.c. and most of this decrease has been suffered by land and live stock, the former accounting for 74·9 p.c. of the total decrease and the latter 21·8 p.c. Generally speaking the eastern provinces show a smaller decline in values than the Prairie Provinces.

Statistics covering mortgage indebtedness were compiled for the first time for Canada in 1931. Every farm owner was asked for a statement of the mortgage debt on his farm. The instructions to enumerators read as follows: "The mortgage debt to be reported includes not only the debt secured by an instrument called a 'mortgage' but also debts protected by deeds of trust, judgments or by any other legal instrument that partakes of the nature of a mortgage and which has the same legal effect. It has reference only to a debt secured by a mortgage, or by an equivalent legal instrument on lands and buildings". This, however, does not represent all the farmers' obligations as it covers only land operated by the owners themselves. The total mortgage debt reported on owned farm land in Canada amounted to $671,776,500 on June 1, 1931. This amount was distributed among the provinces as follows: Ontario 29·74 p.c., Saskatchewan 26·16 p.c., Alberta 16·00 p.c., Quebec 14·35 p.c., Manitoba 8·82 p.c., British Columbia 2·26 p.c., Nova Scotia 0·98 p.c., New Brunswick 0·97 p.c., and Prince Edward Island 0·72 p.c.

In order to state the ratio of the mortgage debt to the value of the farms, only the "fully-owned" farms were considered, because in the case of the "partly-owned, partly-rented" farms the value of the farm was stated as a whole, consequently it is impossible to determine the value of the part which was owned. Since the number of fully-owned farms represents over 79 p.c. of the total, the sample is sufficiently large to be representative of the whole. For the Dominion as a whole 35·56 p.c. of the fully-owned farms reported mortgage debts. This percentage was distributed as follows: Prince Edward Island 33·49 p.c., Nova Scotia 10·35 p.c., New Brunswick 17·61 p.c., Quebec 31·74 p.c., Ontario 40·82 p.c., Manitoba 39·68 p.c., and British Columbia 25·88 p.c. The ratio of the mortgage debt to the value of the mortgaged farm is as follows: Canada 40·86 p.c., Prince Edward Island 33·74 p.c., Nova Scotia 40·45 p.c., New Brunswick 38·26 p.c., Quebec 38·27 p.c., Ontario 44·79 p.c., Manitoba 49·46 p.c., Saskatchewan 38·11 p.c., Alberta 38·75 p.c., and British Columbia 34·76 p.c.

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[1] This material has been revised by E. S. Macphail, Chief, Demography Branch, Dominion Bureau of Statistics.

Statistics of farm expenditures are also given in Table **1**. The figures of taxes are for farms occupied by owners only and therefore do not represent the whole amount of taxes paid. There are no comparable figures for previous censuses, since this information was first asked for on the schedules in 1931.

The expenditure for feed has decreased generally in all the provinces from 1921 to 1931, but the indications are that the decreases are not in the quantities bought but in the prices which prevailed. There has been an increase in the use of fertilizers since 1921. This increase has taken place mostly in Ontario and the Maritime Provinces and may be associated with the growing of potatoes and fruits.

Information was obtained for the first time in 1931 relating to cash expenditure for electric light and power and for spraying chemicals.

The amount of money expended for labour may be taken as an index of the changes which have taken place in methods of farming during the period 1921-31. Compared with 1921 there has been an increase in money spent for hired labour in the Maritime Provinces, where specialized farming requiring manual labour has been developed during the past decade. There was, however, a decrease in labour costs in most of the other provinces where improved machinery has done away to a large extent with the necessity of using manual labour.

1.—Miscellaneous Agricultural Statistics of the Census of 1931 (Covering Occupied Farms, Farm Areas and Values, Mortgage Indebtedness and Farm Expenditures)

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Numbers of occupied farms, 1931..No.	12,865	39,444	34,025	135,957	192,174
Occupied by owner[1]........... “	12,091	37,176	31,933	126,563	157,427
“ part owner, part tenant.......... “	540	1,213	1,164	4,305	13,233
“ tenant............ “	234	1,055	928	5,089	21,514
FARM AREAS, 1931.					
Areas of occupied farms...........acre	1,191,202	4,302,031	4,151,596	17,445,089	22,840,898
Occupied by owner[1]........... “	1,108,258	4,061,333	3,849,881	16,134,602	18,554,741
“ part owner, part tenant.......... “	69,348	161,783	207,414	780,906	2,216,009
“ tenant............ “	13,596	78,915	94,301	529,581	2,070,148
FARM VALUES, 1931.					
Totals............................ $	58,332,029	105,877,410	103,530,618	877,273,510	1,397,665,762
Land.......................... $	23,233,900	38,624,000	38,380,300	426,213,000	585,837,900
Buildings...................... $	19,686,500	43,890,500	38,680,500	257,917,800	487,009,300
Implements and machinery.... $	8,115,900	10,554,100	13,252,500	97,269,500	151,928,200
Live stock.................... $	7,295,729	12,808,810	13,217,318	95,873,210	172,890,362
MORTGAGE INDEBTEDNESS, 1931.					
Totals of mortgage debt[2].......... $	4,866,700	6,570,000	6,485,400	96,409,400	199,755,100
Numbers of farms reporting mortgage debt......................No.	4,250	4,049	5,912	41,923	70,818
Proportions of total numbers of occupied farms..................p.c.	33·03	10·27	17·38	30·84	36·85
Mortgage indebtedness on fully-owned farms[3], 1931—					
Number of farms reporting mortgage debt..............No.	4,049	3,848	5,623	40,167	64,263
Proportions of total numbers of fully-owned farms...........p.c.	33·49	10·35	17·61	31·74	40·82
Acreages of farms reporting mortgage debt...............acre	390,681	509,670	818,929	5,565,961	7,559,555
Value of farm property (land and buildings)............... $	13,731,000	14,742,000	15,956,700	239,856,800	403,096,300
Amounts of mortgage debt.... $	4,632,700	5,962,500	6,104,500	91,781,800	180,543,500
Ratios of mortgage debt to value........................p.c.	33·74	40·45	38·26	38·27	44·79
Average values of farm property per acre..................... $	35·14	28·92	19·48	43·09	53·32
Average amounts of mortgage debt per acre................. $	11·85	11·70	7·45	16·49	23·88
FARM EXPENDITURES, 1930.					
Taxes[4]............................ $	198,740	1,296,870	1,161,720	6,674,700	17,392,350
Rents[5]............................ $	47,260	154,030	122,710	1,051,750	5,737,970
Expenditures for feed............. $	321,640	2,782,420	1,810,310	10,785,280	15,096,760
Numbers of farms reporting...No.	5,634	28,426	19,526	84,166	104,410
Expenditures for fertilizer......... $	950,250	879,540	1,495,830	1,302,200	2,997,060
Numbers of farms reporting....No.	9,065	18,504	17,431	30,480	43,741
Expenditures for seed............. $	227,370	368,120	472,490	2,705,840	4,595,550
Numbers of farms reporting....No.	9,142	17,108	19,192	81,005	111,555
Expenditures for electric light and power...................... $	14,740	99,460	72,130	452,420	1,226,080
Numbers of farms reporting....No.	449	3,267	2,229	17,907	24,367
Expenditures for farm labour (cash and board)................. $	1,071,210	2,460,200	2,345,170	9,454,530	29,674,820
Numbers of farms reporting....No.	5,566	10,991	10,879	38,323	85,890
Expenditures for spraying chemicals $	110,368	249,677	132,155	110,527	451,341

[1] Include farms occupied by managers. [2] Include mortgage debt on owned parts of farms only. [3] The term "fully-owned" as employed here means the owners who own all of their farms and does not include the owned part of the farms partly owned and partly rented. [4] Include taxes on owned farm property only. [5] This item represents "cash" paid in each case and does not include the values of products paid by share tenants.

1.—Miscellaneous Agricultural Statistics of the Census of 1931 (Covering Occupied Farms, Farm Areas and Values, Mortgage Indebtedness and Farm Expenditures) —concluded.

Item.		Manitoba.	Saskat-chewan.	Alberta.	British Columbia.	Total, Nine Provinces.
Numbers of occupied farms, 1931	No.	54,199	136,472	97,408	26.079	728,623
Occupied by owner[1]	"	37,973	90,691	71,060	21,385	586,299
" part owner, part tenant	"	6,369	24,737	14,540	1,841	67,942
" tenant	"	9,857	21,044	11,808	2,853	74,382
FARM AREAS, 1931.						
Areas of occupied farms	acre	15,131,685	55,673,460	38,977,457	3,541,541	163,254,959[6]
Occupied by owner[1]	"	9,272,776	30,289,620	21,423,004	2,489,933	107,184,148
" part owner, part tenant	"	2,974,227	17,141,336	11,736,774	744,136	36,031,933
" tenant	"	2,884,682	8,242,504	5,817,679	307,472	20,038,878
FARM VALUES, 1931.						
Totals	$	388,142,128	1,272,662,978	869,431,858	174,837,175	5,247,753,468
Land	$	200,270,300	765,349,000	534,092,700	98,356,900	2,710,358,000
Buildings	$	88,389,200	223,794,500	137,331,700	46,224,300	1,342,924,300
Implements and machinery	$	54,847,200	185,510,506	116,300,600	12,885,500	650,664,000
Live stock	$	44,635,428	98,008,978	81,706,858	17,370,475	543,807,168
MORTGAGE INDEBTEDNESS, 1931.						
Totals of mortgage debt[2]	$	59,223,400	175,770,300	107,519,000	15,177,200	671,776,500
Numbers of farms reporting mortgage debt	No	18,710	55,955	35,003	6,230	242,850
Proportions of total numbers of occupied farms	p.c	34·52	41·00	35·93	23·89	33·33
Mortgage indebtedness on fully-owned farms[3], 1931—						
Number of farms reporting mortgage debt	No.	15,067	41,757	28,152	5,534	208,460
Proportions of total numbers of fully-owned farms	p c.	39·68	46·04	39·62	25·88	35·56
Acreages of farms reporting mortgage debt	acre	4,342,019	15,801,350	9,144,892	569,841	44,702,898
Value of farm property (land and buildings)	$	95,353,700	344,339,300	221,331,100	36,886,300	1,385,293,200
Amounts of mortgage debt	$	47,162,800	131,240,900	85,766,400	12,821,800	566,016,900
Ratios of mortgage debt to value	p c	49·46	38·11	38·75	34·76	40·86
Average values of farm property per acre	$	21·96	21·79	24·20	64·73	30·99
Average amounts of mortgage debt per acre	$	10·86	8·31	9·38	22·50	12·66
FARM EXPENDITURES, 1930.						
Taxes[4]	$	4,514,580	13,903,520	7,621,450	1,370,710	54,134,640
Rents[5]	$	656,760	1,076,350	1,145,910	1,044,490	11,037,230
Expenditures for feed	$	2,222,570	4,921,110	3,697,580	5,645,940	47,283,610
Numbers of farms reporting	No	19,020	34,787	23,387	15,962	335,318
Expenditures for fertilizer	$	16,950	22,360	16,950	440,590	8,121,730
Numbers of farms reporting	No	191	199	222	5,225	125,058
Expenditures for seed	$	1,264,110	3,556,670	2,323,520	529,030	16,042,700
Numbers of farms reporting	No	18,455	41,609	31,409	13,331	342,806
Expenditures for electric light and power	$	73,080	114,350	101,070	224,650	2,377,980
Numbers of farms reporting	No	1,230	1,908	1,654	5,730	58,741
Expenditures for farm labour (cash and board)	$	9,564,000	23,408,040	16,606,260	5,841,750	100,425,980
Numbers of farms reporting	No.	23,134	57,047	39,454	9,760	281,044
Expenditures for spraying chemicals	$	23,185	40,841	40,762	118,134	1,276,990

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[1] Include farms occupied by managers. [2] Include mortgage debt on owned parts of farms only. [3] The term "fully-owned" as employed here means the owners who own all of their farms and does not include the owned part of the farms partly owned and partly rented. [4] Include taxes on owned farm property only. [5] This item represents "cash" paid in each case and does not include the values of products paid by share tenants. [6] Occupied farm lands in the Northwest Territories and Yukon have an area of approximately 5,000 acres. (See Table 1, pp. 1032–1033.)

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